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November 2004

An Evaluation

State of Wisconsin Investment Board

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State Auditor - Janice Mueller

Audit Prepared by

Diann Allsen, Director and Contact Person
Sherry Haakenson
Xia Cha
Bethany Winker

CONTENTS

Letter of Transmittal 1

Report Highlights 3

Introduction 9

Investment Performance of the Wisconsin Retirement System 17

Investment Goals and Strategies 18
Composition of Fixed Retirement Trust Fund 19
Investment Strategy Decisions 22
Performance Compared to Benchmarks 23
Comparison to Other Public Pension Funds 26

Investment Management Costs 29

External Management Costs 29
Private Equity and Real Estate 32
Quantitative Funds 32
Costs for External Support Services 35
Future Considerations 38
Internal Operating Budget 38
Limits to External Management Authority 40
Reporting Requirements 43

Compensation Plan 47

History 47
The Bonus Program 49
Compensation Levels 51
Base Salaries 52
Bonus Awards 53
Comparison to Other Investment Professionals 55
Support Staff Compensation 56
Other Compensation 57
Effect on Investment Staffing 61
Rewarding Meritorious Performance 62

Appendices

Appendix 1—Investment Board Organization Chart
Appendix 2—Performance of Fixed and Variable Retirement Trust Funds' Asset Classes
Appendix 3—Bonus Award Process for Investment Staff

Response

From the Executive Director of the State of Wisconsin Investment Board

State of Wisconsin \ LEGISLATIVE AUDIT BUREAU

JANICE MUELLER
STATE AUDITOR

22 E. MIFFLIN ST., STE. 500
MADISON, WISCONSIN 53703
(608) 266-2818
FAX (608) 267-0410
Leg.Audit.Info@legis.state.wi.us

November 22, 2004

Senator Carol A. Roessler and
Representative Suzanne Jeskewitz, Co-chairpersons
Joint Legislative Audit Committee
State Capitol
Madison, Wisconsin 53702

Dear Senator Roessler and Representative Jeskewitz:

We have completed an evaluation of the State of Wisconsin Investment Board, as directed by s. 25.17(51m), Wis. Stats. As of December 31, 2003, the Investment Board managed a total of $69.1 billion in investments that included assets of the Wisconsin Retirement System, the State Investment Fund, and five smaller insurance and trust funds.

Despite negative returns from 2000 through 2002, the Investment Board continues to exceed its long-term actuarial investment expectations for the Fixed Retirement Trust Fund. In 2003, both retirement funds—the Fixed Retirement Trust and the Variable Retirement Trust—outperformed their benchmarks, and the Fixed Retirement Trust Fund's 2003 performance ranked highly among ten pension funds surveyed for one- and five-year periods.

The Investment Board's costs to manage investments have increased from $87.4 million in 1999 to $156.7 million in 2003, or by 79.3 percent. Most of the increase is related to increased costs paid to external investment managers and advisors. In addition, a new compensation plan has increased salaries and bonuses for the Board's 100.5 unclassified staff. We include a recommendation for the Investment Board to regularly evaluate the added value provided by external investment managers relative to their costs and in comparison to other investment options.

Currently, the Investment Board's budget for internal operating costs and the percentage of investments that may be externally managed are limited by statute. Under these limits, investment management decisions are not necessarily driven by the most cost-effective options available. In light of increasing costs and increasing use of external managers and advisors, changes to these limits may be warranted to further promote the most effective use of resources and to increase accountability over the Investment Board's costs.

We appreciate the courtesy and cooperation extended to us by the Investment Board. A response from the Board's Executive Director follows the appendices.

Respectfully submitted,

Janice Mueller

Janice Mueller
State Auditor

JM/DA/ss

Report Highlights ▪

Both retirement funds exceeded investment performance benchmarks in 2003.

External investment management costs have increased significantly.

The compensation plan revisions of 2000 led to significant increases in salaries and bonuses for investment staff.

Statutory limits in the Investment Board's internal budget and use of external investment management may warrant changes.

The State of Wisconsin Investment Board manages the assets of the Wisconsin Retirement System, the State Investment Fund, and five other state insurance and trust funds. Two Wisconsin Retirement System funds—the Fixed Retirement Trust and the Variable Retirement Trust—account for more than 90 percent of all assets under its management and fund retirement benefits for more than 500,000 current and former state and local government employees.

In total, the Investment Board managed $69.1 billion in assets as of December 31, 2003. Its investments included domestic and international stocks and bonds, real estate, direct loans to private companies, alternative investments such as private equity, and cash. The Investment Board's nine-member Board of Trustees establishes long-term investment strategies and policies. The Executive Director, 100.5 full-time equivalent professional staff in the State's unclassified civil service system, and 4.0 classified employees are responsible for day-to-day investment management. For some investments, external managers and advisors supplement staff resources or provide expertise that would otherwise not be available.

Statutes require the Legislative Audit Bureau to perform a biennial management audit of the Investment Board. In addition to reviewing its performance in managing Wisconsin Retirement System assets, we analyzed significant increases in investment costs that are related to external management and support services, and we reviewed revisions to a staff compensation plan that were implemented in 2000.

Investment Performance

A rebound in investment markets during 2003 brought both retirement funds double-digit returns that were among their highest in the past 20 years. As shown in Table 1, 2003 annual returns were 24.2 percent for the Fixed Retirement Trust Fund and 32.7 percent for the Variable.

Table 1

Annual Returns

Year	Fixed Fund	Variable Fund
1999	15.7%	27.8%
2000	(0.8)	(7.2)
2001	(2.3)	(8.3)
2002	(8.8)	(21.9)
2003	24.2	32.7

Despite losses from 2000 through 2002, the retirement funds also outperformed their one-, five-, and ten-year benchmarks at the end of 2003. Furthermore, the Fixed Retirement Trust Fund continues to exceed the actuarially expected investment results of 7.8 percent over the long-term.

Relative to nine other public pension funds, the Fixed Retirement Trust Fund's performance improved. Its five-year return as of December 31, 2003, was first among the ten funds surveyed for our current and previous evaluation. In our 2001 evaluation, the Fixed Fund had ranked last in performance. The improvement was related, in part, to a relatively smaller allocation of Fixed Fund assets to domestic stocks as U.S. markets declined from 2000 through 2002. As a result, losses were smaller than those of other public pension funds.

External Management Costs

In addition to its own operating costs, the Investment Board incurs costs for the services of external investment managers and advisors. As shown in Table 2, both internal and external costs have increased in the past five years, but external costs have increased more significantly. In 2003, they were $140.2 million and represented 89.5 percent of the Investment Board's total costs.

Table 2

Investment Board Costs
Calendar Years 1999 through 2003
(In Millions)

	1999	2000	2001	2002	2003	Percentage Change
Internal Operating Expenses	$12.5	$ 15.1	$ 14.7	$ 16.2	$ 16.5	32.0%
External Investment Expenses	74.9	87.8	114.4	126.1	140.2	87.2
Total	**$87.4**	**$102.9**	**$129.1**	**$142.3**	**$156.7**	79.3

Costs associated with externally managed investments in quantitative funds represented 28.2 percent of external investment expenses in 2003. These funds are somewhat similar to index funds, but they aim for higher earnings based on quantitative analysis of individual companies, market segments, and economic trends. Management fees for quantitative funds have two components: a base that reflects the market value of assets under management, and a performance fee that allows the external fund manager to share the excess return if a fund exceeds established performance thresholds. Under such a structure, fees depend upon how well funds perform. When funds exceed performance thresholds, fees increase significantly.

Compensation Plan

Compensation for its own staff represented 8.4 percent of the Investment Board's total costs in 2003. Expenditures for staff compensation increased $5.0 million, or 61.0 percent, over 1999 levels, in large part because of changes to the compensation plan that were authorized under 1999 Wisconsin Act 9 and took effect in 2000. As shown in Table 3, staff compensation expenditures were $13.2 million in 2003.

Table 3

Investment Board Staff
Compensation Expenditures
By Calendar Year
(In Millions)

Year	Expenditures
1999	$ 8.2
2000	11.2
2001	11.3
2002	13.3
2003	13.2

The restructured compensation plan also allows increased performance bonuses for investment and support staff. Since the plan's implementation in 2000, the Investment Board has awarded more than $6.7 million in bonuses. In 2004, bonus payments totaled $1.8 million, or more than five times the total paid in 1999.

Average unclassified compensation for 2003 is shown in Table 4. For 2003 performance, the average bonus payment was $32,292 for investment staff, and $5,469 for support staff. Bonuses ranged from a high of $162,492 to a low of $0. Under the new compensation plan, overall compensation for investment staff, including salaries and bonuses, has increased to 74.3 percent of the Investment Board's private-sector peer group. The Investment Board's compensation levels compare favorably to those of other public pension funds.

Increased compensation levels appear to have helped the Investment Board recruit and retain experienced staff, although market conditions have also affected staffing efforts. We include a recommendation for the Investment Board to remain diligent in rewarding only meritorious performance through its bonus program.

Table 4

Average Unclassified Compensation for 2003

Average Compensation	Investment Staff	Support Staff
Salary	$112,802	$58,485
Bonus[1]	32,292	5,469
Total Compensation[2]	142,159	63,478

[1] Bonuses for 2003 performance were paid in 2004. Average bonus awards are calculated based on the number of staff who received a bonus award for 2003.
[2] Totals were based on 55 staff for investment staff and 46 staff for support staff.

In addition to salaries and performance bonuses, the Investment Board compensates its staff in other ways, including performance recognition payments, signing and guaranteed bonuses, and additional retirement contributions. We question whether the Investment Board is circumventing its statutory limit on investment director positions, which have a higher retirement formula factor. The statutory limit for the Investment Board is 11 positions. However, since 2001 the Investment Board has paid $121,796 in additional retirement contributions to give six portfolio managers and the Human Resource Director equivalent executive-level retirement benefits.

Future Considerations

The Investment Board's internal budget is limited by a statutory formula and the number of staff authorized. The percentage of investments that may be externally managed is also limited by statute. In light of increasing costs and increasing use of external managers and advisors, changes to these limits may be warranted to further promote the most effective use of resources and to increase accountability over the Investment Board's costs. Under current limits, investment management decisions are not necessarily driven by the most cost effective options available. At the same time, it is unclear whether the Investment Board is fully meeting the intent of the statutory limit on external management. More detailed reporting may also be useful to the Legislature and others.

The Investment Board recently began a project, which it plans to complete in spring 2005, to analyze the optimal mix of investment approaches and to identify related statutory changes that may be needed to achieve that mix. The Legislature may wish to consider the results of the Investment Board's project as it deliberates changes to the statutory limits.

Recommendations

Our recommendations address the need for the Investment Board to:

- evaluate and, in its annual report to the Legislature, report on the cost and added value provided through its quantitative funds in comparison to other investment options *(p. 35);*

- continually evaluate its contracting procedures to ensure that it is diligently analyzing and justifying the need for consulting services *(p. 38);*

- include in its quarterly reports to the Legislature all costs directly charged against investment income, and provide more descriptive information regarding the nature of these costs *(p. 45);*

- reconsider its use of performance recognition payments to provide financial awards to staff independent of its larger bonus program, or ensure that performance recognition payments are also considered when awarding bonuses *(p. 58);*

- discontinue its practice of paying additional retirement contributions for staff not designated as executive participating employees, and pursue statutory changes if it believes additional executive positions are warranted *(p. 60);* and

- remain diligent in using the bonus program to reward only meritorious performance and report to the Joint Legislative Audit Committee, upon completion, on changes it makes to its bonus program *(p. 64).*

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Introduction ▪

The Investment Board's mission is to provide prudent and cost-effective management of the funds it holds in trust, through investment returns that are consistent with the purpose and risk profile of each fund. The $69.1 billion in assets under its management as of December 31, 2003, included:

- $62.8 billion in the Wisconsin Retirement System, which accounted for 90.9 percent of assets under management at the end of 2003 and represents pension funds for 512,000 current and former employees of state agencies and most local governments in Wisconsin, but not the City of Milwaukee and Milwaukee County;

- $5.5 billion in the State Investment Fund, which accounted for approximately 8.0 percent of assets under management at the end of 2003 and provides short-term investment and cash management for state funds, the Wisconsin Retirement System, and over 1,100 local units of government that choose to participate in the Local Government Investment Pool; and

- a total of approximately $0.8 billion in the Injured Patients and Families Compensation Fund (formerly the Patients Compensation Fund), the State Life Insurance Fund, the Local Government Property Insurance Fund, the Historical Society Endowment Fund, and the EdVest Tuition Trust Fund, which together accounted for 1.1 percent of assets under the Investment Board's management at the end of 2003.

The Department of Employee Trust Funds administers the Wisconsin Retirement System and has responsibility for its day-to-day management, while the Investment Board invests the system's assets to finance post-retirement benefits. To manage these assets, the Investment Board buys, holds, and sells a mix of investment vehicles, including:

- domestic and international public equities (stocks) and public bonds;
- real estate;
- direct loans to private companies, which are known as private placements;
- private equity, such as venture capital; and
- cash and short-term debt instruments.

The Board of Trustees establishes investment strategies and policies.

The nine-member Board of Trustees is responsible for establishing long-term investment strategies and policies, as well as for developing investment guidelines and monitoring investment performance. Two trustees are participants in the Wisconsin Retirement System, and one is the Secretary of the Department of Administration or his designee. The remaining six trustees are appointed by the Governor with the consent of the Senate. Four of these six are required to have at least ten years of investment experience. One must have at least ten years of local government financial experience. Appointed trustees serve six-year terms.

Investment Board staff are responsible for day-to-day investment decisions.

The trustees have delegated day-to-day investment management decisions to the Investment Board's professional staff, which includes the Executive Director, who is appointed by the Board of Trustees. Of the 100.5 unclassified staff, 52.9 are investment staff, with a statutory limit of 11 investment directors, and 47.6 are support staff. Investment staff are those directly involved in the investment of assets, while support staff include legal, financial, human resource, and information technology staff. Many support staff perform duties closely related to the work of investment professionals, such as trade settlement, class action litigation, and securities lending. The Investment Board's current organization chart is included as Appendix 1.

The Investment Board recently underwent management and board changes. Six of the nine trustees were newly appointed during 2003 and 2004. In addition, the Executive Director who had served since 1989 retired in December 2003; the current Executive Director was appointed in June 2004, and a Deputy Executive Director was hired in September 2004.

The Executive Director develops and recommends investment policies for the Board's adoption, and each year—with advice from senior investment staff and professional consultants—develops an asset allocation plan. Assets of each of the eight funds shown in Table 5 are allocated into portfolios that include various types (or classes) of investments. The plan is submitted to the Board of Trustees for review and approval in January and is subsequently included in the Investment Board's annual report to the Legislature, as required by statute.

Table 5

Funds Managed by the Investment Board

Description of Fund	Value as of 12/31/2003	Types (Classes) of Investments
Wisconsin Retirement System		
Fixed Retirement Trust Fund *Diversified balanced portfolio that funds benefits to beneficiaries*	$56,899,000,000	Equities, fixed-income, real estate, limited partnerships, private equity
Variable Retirement Trust Fund *Equity portfolio that funds variable benefits for those who elect to participate*	5,930,000,000	Equities
State Investment Fund		
Pool of state agency and local government cash balances	5,501,000,000[1]	U.S. Treasury securities, certificates of deposit, repurchase agreements, commercial paper
Other Funds		
Injured Patients and Families Compensation Fund *Provides medical malpractice insurance for Wisconsin's health care providers*	653,000,000	Fixed-income, equities
State Life Insurance Fund *Offers life insurance policies up to $10,000 for Wisconsin residents who choose coverage*	74,000,000	Fixed-income
Local Government Property Insurance Fund *Provides property insurance coverage to participating local units of government*	31,000,000	Fixed-income
EdVest Tuition Trust Fund *Funds EdVest Wisconsin, a savings program for college expenses*	12,000,000	Fixed-income
Historical Society Endowment Fund *Includes gifts and grants made directly to the State Historical Society*	11,000,000	Fixed-income, equities
Total	**$69,111,000,000**	

[1] Excludes retirement and other funds managed by the Investment Board that are invested in the State Investment Fund.

The Investment Board's professional investment staff research, select, buy, and sell specific investment vehicles that they expect to perform according to the strategies and policies established by the Board of Trustees. In addition, external managers are hired to invest and manage certain assets, and the Investment Board invests in index funds, such as the Russell 3000, which seeks to replicate the performance of the 3,000 largest U.S. companies.

The Investment Board manages assets of the Wisconsin Retirement System in two funds:

The Fixed Retirement Trust Fund represented 82.3 percent of assets under management at the end of 2003.

- The Fixed Retirement Trust Fund, which includes a mix of several different classes of investments, provides income to support retirement benefits for Wisconsin Retirement System participants. The assets of several other employee benefit programs, totaling $2.1 billion at the end of 2003, are also invested in the Fixed Retirement Trust Fund. The largest of these programs is the accumulated sick leave conversion program. The Fixed Retirement Trust Fund represented 82.3 percent of assets under the Investment Board's management at the end of 2003.

- The Variable Retirement Trust Fund, for which returns are typically more volatile than the Fixed Retirement Trust Fund, is primarily invested in stocks. Approximately 21.2 percent of Wisconsin Retirement System participants had elected to place a portion of their pension accounts in the Variable Fund as of the end of 2003, when it represented 8.6 percent of assets under the Investment Board's management. As a result of enactment of 1999 Wisconsin Act 11, the Variable Fund was reopened to participants active in the system after 2000.

Investment Board trustees and staff are held by s. 25.15(2)(a), Wis. Stats., to the "prudent expert" standard of responsibility in developing and implementing investment strategies that appropriately balance risk and return. Under this standard, they are directed to manage investment assets with the care, skill, and diligence that a prudent expert would exhibit acting in a similar capacity, with similar resources, and for similar types of funds.

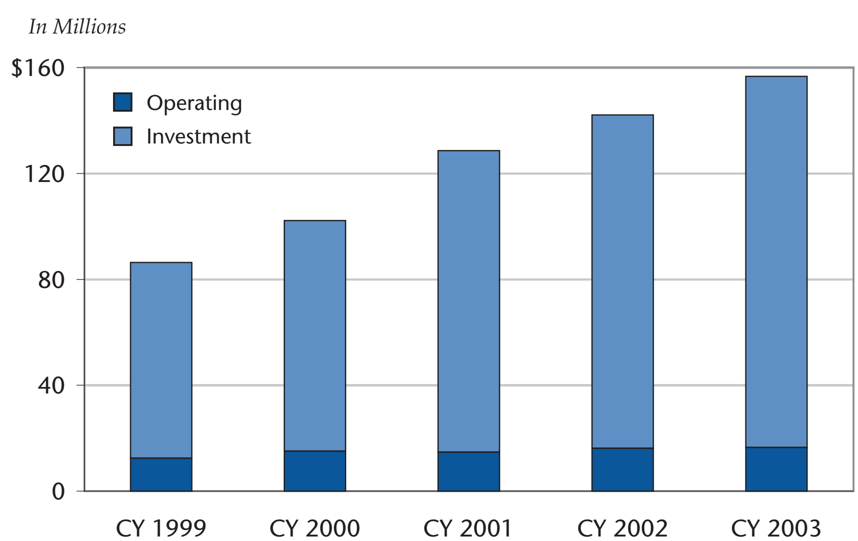
The Investment Board's operating costs for staff salaries and fringe benefits, supplies, and permanent property are funded through assessments to the various funds managed by the Investment Board, as authorized by its continuing program revenue appropriation. No general purpose revenues support Investment Board operations. As part of 1999 Wisconsin Act 9, the Investment Board's operating budget was changed from a set dollar amount to a budget that correlates to the value of assets under management. Act 9 also provided the Investment Board increased flexibility in the operation of its bonus compensation program.

The Investment Board's costs totaled $156.7 million in 2003.

The Investment Board is allowed to charge certain investment costs directly to current investment income, rather than to its program revenue appropriation. These costs include fees paid to external investment managers and costs for other support services, such as custodial banking services, consultant fees, electronic research services, and legal fees. The Investment Board's costs have grown significantly over time, from $87.4 million in 1999 to $156.7 million in 2003. As shown in Figure 1, a significant portion of the increase is associated with investment costs that are directly charged to investment income.

Figure 1

Trend of Operating and Investment Costs
1999 through 2003



Statutes require the Legislative Audit Bureau to perform a biennial management audit of the Investment Board, as well as annual financial audits of its investment activities. The biennial management audit requirement, s. 25.17(51m), Wis. Stats., was implemented in 1999; this report represents our third management audit under this requirement. It includes a review of the Investment Board's performance in managing the Wisconsin Retirement System assets, as well as an analysis of the reasons for significant increases in external investment costs. We also reviewed revisions to the compensation plan that were implemented in 2000, after 1999 Act 9 revised the Investment Board's budgetary structure and provided increased flexibility for its bonus program.

To conduct our evaluation, we

- compared one-, five-, and ten-year returns to performance benchmarks established by the Investment Board;
- analyzed staff compensation and investment cost data;
- reviewed documents pertaining to the Investment Board's compensation plan, procurement procedures, and use of external managers;
- interviewed staff of the Investment Board and the Department of Employee Trust Funds; and
- surveyed the managers of other large public pension funds to obtain performance and bonus data, where applicable.

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Investment Performance of the Wisconsin Retirement System ■

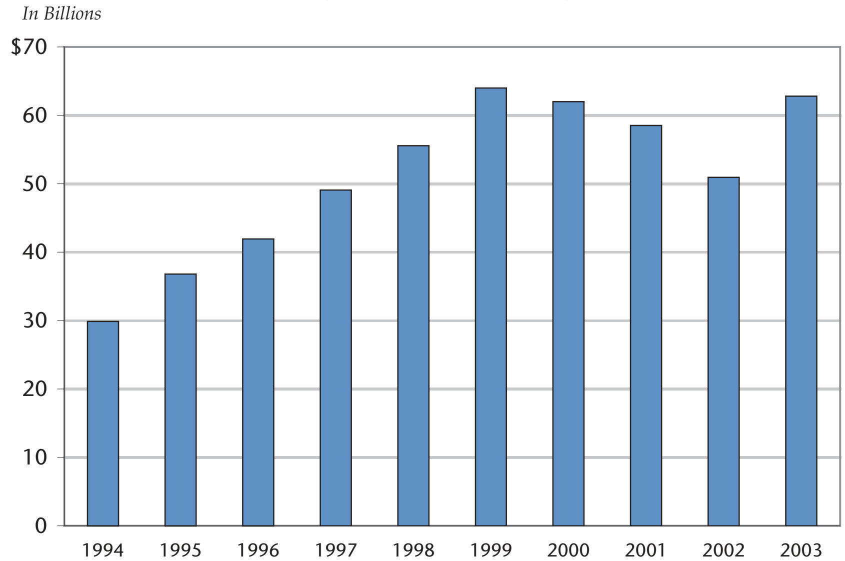
Wisconsin Retirement System assets have more than doubled in the last ten years.

Under the Investment Board's management, Wisconsin Retirement System assets more than doubled from 1994, when they totaled $29.9 billion, through 2003, when they totaled $62.8 billion. Like other institutional and individual investors, the Investment Board was significantly affected by market declines from 2000 through 2002. At the end of 1999, the combined value of assets in the Fixed and Variable funds was $64.3 billion. At the end of 2002, the retirement fund assets had declined 20.8 percent to $50.9 billion. However, as shown in Figure 2, a market rebound during 2003 allowed for a substantial recovery.

Absolute growth or decline in assets does not necessarily express how well investments are being managed or whether an effective investment strategy has been developed and implemented. In addition to market volatility, external events and factors outside the Investment Board's control can affect investment returns and the rate at which assets grow. For example, both the September 11, 2001 terrorist attacks and corporate accounting scandals have significantly affected markets and investment returns.

Figure 2

Wisconsin Retirement System Assets
(As of December 31)



Considering market volatility and the uncontrollable factors that affect investment returns, it can be difficult to measure an investment organization's effectiveness in managing investments under its control. To provide an overall perspective on the Investment Board's activities and decisions, we assessed the effectiveness of its management of Wisconsin Retirement System assets in two ways. First, we compared the one-, five-, and ten-year returns it achieved for the Wisconsin Retirement System to the performance benchmarks established by the Board of Trustees. This comparison illustrates how well the Investment Board has performed in relation to the market but provides only a partial view of the effectiveness of its overall investment strategies. Therefore, we also compared the Wisconsin Retirement System's performance to the performance of other public pension funds.

Investment Goals and Strategies

The basic investment objective of the Wisconsin Retirement System is long-term earnings.

The basic investment objective of the Wisconsin Retirement System is to provide earnings that, along with contributions from employers and participants, will be sufficient for the system to pay projected pension benefits over time. From 1992 through 2003, the actuarial assumption for the Fixed Retirement Trust Fund was an annual average return of 8.0 percent over the long term. That is the long-term rate the actuary expects will be earned based on a mix of assets similar to that of the Fixed Retirement Trust Fund. At the end of 2003, the actuary recommended a reduction in its investment expectation to 7.8 percent based on slightly lower long-term market expectations of investment practitioners and advisors.

The Variable Retirement Trust Fund was established to provide a retirement option for Wisconsin Retirement System participants who were interested in taking a higher degree of risk by increasing their investment in equities for the potential of greater long-term returns. The investment goal for the Variable Retirement Trust Fund is to exceed similar equity portfolios over a full market cycle. A goal for both funds is to exceed performance benchmarks established by the Board of Trustees, which reflect the performance of general market indices.

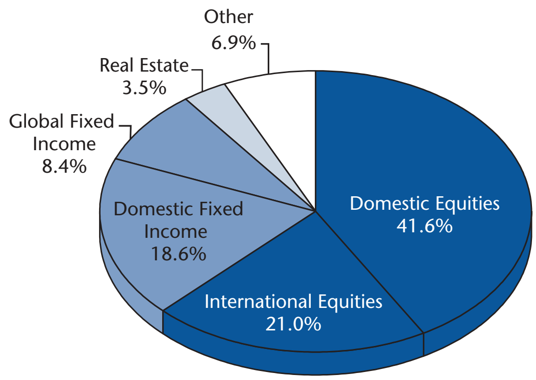
To achieve these goals, the Investment Board has established an investment strategy for both the Fixed Retirement Trust Fund and the Variable Retirement Trust Fund, which it refines each year within the general investment policies and restrictions set forth in ch. 25, Wis. Stats. As part of this process, the Board of Trustees, the Executive Director, and senior investment staff make several key decisions. One of the most critical involves allocating assets among various investment classes and portfolios. Some pension experts believe that up to 90 percent of the variation in performance among investment entities is the result of overall investment or asset allocation decisions, not the selection of individual investments. Decisions for the Fixed Retirement Trust Fund require more research and analysis, since the Variable Retirement Trust Fund's allocation is statutorily defined as equities.

Composition of Fixed Retirement Trust Fund

As shown in Figure 3, the Fixed Retirement Trust Fund's assets are allocated and diversified among a wide variety of investment classes, including stocks and other equity investments, bonds and other fixed-income securities, international investments, real estate, and other investments. In contrast, the Variable Retirement Trust Fund's asset mix as of December 31, 2003, included 78.3 percent domestic stocks, 20.0 percent international stocks, and 1.7 percent cash.

Figure 3

Asset Allocation for the Fixed Retirement Trust Fund
(As of December 31, 2003)



Domestic equities represent the largest asset class for the Fixed Retirement Trust Fund.

Approximately 62.6 percent of the Fixed Retirement Trust Fund's assets were invested in domestic and international equities as of December 31, 2003. Domestic equities, which are the common stock of U.S. companies, constitute the largest asset class and accounted for $23.7 billion of the Fixed Fund's $56.9 billion in assets at the end of 2003. Domestic equities are managed through 11 portfolios that are diversified among small, medium, and large companies. In addition, the Investment Board recently established an equity portfolio focused on the health care sector. International equities primarily include stock of companies in developed countries. A small portion of the $12.0 billion in international equities as of December 31, 2003—$375.0 million—is invested in emerging markets, a category of international investments that focuses on countries with developing economies in Asia, eastern Europe, and Latin America.

Domestic and global fixed-income investments accounted for 27.0 percent of the Fixed Fund's assets at the end of 2003. Over $10.6 billion is invested in domestic fixed-income securities, which largely include U.S. government bonds and corporate bonds purchased in public markets. A small portion of the domestic fixed-income asset class, $829.0 million, is invested in high-yield investments, which carry a greater risk of default but offer higher rates of return than investment-grade securities. Also included in domestic fixed-income investments at the end of 2003 was $579.0 million in private commercial real estate mortgages, as well as $401.0 million in direct, privately negotiated loans to businesses in Wisconsin. These investments are known as private placements, or private debt. Private placements are typically less liquid than comparable public securities and, therefore, are expected to provide extra return.

The Investment Board discontinued its non-Wisconsin private placements portfolio.

Until recently, the Investment Board also managed a large portfolio of private placements with non-Wisconsin companies, which totaled $3.0 billion at the end of 2002. However, in June 2003, it decided to discontinue this portfolio after concluding that it was not realizing sufficient benefits and returns for the added cost and risk involved with maintaining a large private placement portfolio. We have made similar assessments in the past. The non-Wisconsin private placements portfolio was reduced to approximately $300,000 by June 2004.

The Fixed Retirement Trust Fund's global fixed-income investments include almost $4.1 billion in global bond portfolios that encompass both U.S. and foreign debt obligations. The Investment Board invests $319 million in fixed-income securities in emerging markets. Another $365 million is invested in high-yield global fixed-income securities.

Real estate investments, which accounted for $2.0 billion of the Fixed Retirement Trust Fund's assets at the end of 2003, include shopping malls, office buildings, and other real estate owned directly by the Investment Board, as well as investments in joint ventures and partnerships that acquire and manage real estate investments. The Investment Board's real estate investments include domestic and international holdings.

The Investment Board recently established a portfolio dedicated to venture capital partnerships located in Wisconsin and the Midwest.

Other investment types include the alternative investment class, which accounted for $2.0 billion, or 3.4 percent, of the Fixed Retirement Trust Fund's assets at the end of 2003, as well as a $328.0 million multi-asset portfolio and $1.6 billion in cash. Alternative investments often offer the prospect of greater returns, but they also bear increased risk of failure. This class includes private equity, such as venture capital and leveraged buyouts, in both domestic and international markets. The Investment Board's staff manages the majority of these holdings by participating in funds and partnerships. One of the newer alternative investment portfolios is a portfolio dedicated to investments in venture capital partnerships in bio-technology that are primarily located in Wisconsin and the Midwest. The portfolio had $20 million in investments at the end of 2003.

The $328.0 million multi-asset portfolio invests primarily in equity and debt securities in developed and emerging markets, but it also may invest in real estate, natural resources, private equity, and money market instruments. Cash, which accounted for the remaining 2.9 percent of the Fixed Retirement Trust Fund's assets at the end of 2003, consisted of temporary balances awaiting permanent investments. These funds are invested in short- and intermediate-term obligations of the U.S. government and its agencies, as well as high-quality commercial bank and corporate debt obligations.

Investment Strategy Decisions

Diversification among different investment classes is important to asset allocation.

Determining an appropriate asset allocation for a pension fund includes balancing risks with expected returns. Certain investment classes entail greater degrees of both risk and expected return. Others entail less risk but have correspondingly lower expected rates of return. An important principle of successful asset allocation is diversification, which limits exposure to the risks associated with any particular investment class. Because the various investment classes may react differently to changes in the business cycle, inflation rates, and foreign exchange rates, diversifying a fund across several investment classes can add value by reducing risk and stabilizing the rate of return.

A second key investment management decision is whether to actively or passively manage investments. Active portfolio management seeks to increase investment returns by selecting individual investments on a company-by-company basis, without attempting to match the mix represented in the market as a whole. Passive management seeks to replicate a market index and to match its returns. The benefits of a passively managed portfolio are that it will likely perform as well as the index it is designed to mimic, and it will cost less to administer because little company-specific investment research is needed. Actively managed portfolios, on the other hand, may provide additional value by outperforming the market, but they also carry the risk of potentially earning less than passively managed portfolios, and at a higher cost.

In 1998, the Investment Board began using quantitative strategies, which are a blend of active and passive management strategies. A quantitative strategy, which is also deemed an enhanced indexing strategy, generally tracks a specified mix of stocks represented in the market, yet it may also employ an active component in selecting companies in which to invest. Most of the quantitative strategies used by the Investment Board rely heavily on quantitative analysis, rather than subjective or qualitative inputs, for the active selection of companies. Quantitative analysis involves evaluating the value and future prospects of a security by examining measurable characteristics such as revenues, earnings, profit margins, market share, and volatility.

A third key investment management decision is whether to use Investment Board staff to make investment decisions and execute security trades, or to hire external managers to perform these functions. External managers can provide expertise not available from internal staff, or they can supplement internal staff resources. However, costs for external management typically exceed those for internally managed funds. Also, external management decreases control and oversight in individual investment decisions.

Performance Compared to Benchmarks

After three years of negative returns, the retirement funds returned to double-digit returns in 2003.

Both the Fixed Retirement Trust Fund and the Variable Retirement Trust Fund earned double-digit investment returns for five consecutive years in the late 1990s, as shown in Table 6. However, a market downturn beginning in the second half of 2000 resulted in negative returns for both funds during 2000, 2001, and 2002. A rebound in the markets during 2003 returned the funds to double-digit annual returns that were among the highest in the last 20 years.

Table 6

Wisconsin Retirement System Annual Returns
(For Years Ending December 31, 1994-2003)

Year	**Fixed Retirement Trust Fund** Annual Return	**Variable Retirement Trust Fund** Annual Return
1994	(0.6)%	0.8%
1995	23.1	25.6
1996	14.4	19.8
1997	17.2	21.6
1998	14.6	17.5
1999	15.7	27.8
2000	(0.8)	(7.2)
2001	(2.3)	(8.3)
2002	(8.8)	(21.9)
2003	24.2	32.7

Investment performance benchmarks were exceeded in 2003.

Even with three consecutive years of losses, the Investment Board continued to exceed the actuary's investment expectation for the Fixed Retirement Trust Fund, which, as noted, is currently an annual average return of 7.8 percent over the long-term. The ten-year average annual rate of return for the Fixed Fund was 8.3 percent as of December 2002, which improved to 9.1 percent at the end of 2003. The Variable Retirement Trust Fund provided an even greater ten-year average annual return of 9.4 percent at the end of 2003. Furthermore, as shown in Table 7, both retirement funds outperformed their one-, five-, and ten-year benchmarks, which represent the market-based returns that the Investment Board attempts to exceed. Appendix 2 compares the performance of each investment class to benchmarks for one-, five-, and ten-year periods ending December 31, 2003.

Table 7

Wisconsin Retirement System Performance

Period Ending December 31, 2003	**Fixed Retirement Trust Fund** Average Annual Rate of Return	**Fixed Retirement Trust Fund** Investment Benchmark	**Variable Retirement Trust Fund** Average Annual Rate of Return	**Variable Retirement Trust Fund** Investment Benchmark
1-year	24.2%	22.9%	32.7%	32.1%
5-year	4.9	4.0	2.4	0.7
10-year	9.1	8.7	9.4	8.8

The Investment Board establishes benchmarks for each of its investment portfolios, as well as for the Fixed and Variable Retirement Trust Funds. Typically, the portfolio benchmarks are based on market indices. For example, the benchmark for large cap portfolios, which are domestic equities portfolios that include stocks of companies valued at more than $5.0 billion, is the S&P 500 Index, which measures the performance of large domestic companies. The overall benchmarks for the Fixed and Variable Retirement Trust Funds are a composite of the underlying portfolio benchmarks. Each of the benchmarks is approved by the Board of Trustees.

The internal small cap stock portfolio provided a return of 89.9 percent during 2003.

One asset class that contributed to the Investment Board's success in outperforming its benchmarks was domestic equities, which exceeded benchmarks for all three time periods ending December 31, 2003. The Investment Board's internal small cap portfolio had particularly notable performance during 2003:

following a one-year return of -43.7 percent during 2002, its one-year return in 2003, 89.9 percent, was almost double its benchmark of 47.3 percent. In anticipation of economic recovery in the domestic equities market, the Investment Board held a larger portion of small cap stocks in sectors expected to benefit from a recovering economy. For example, as of December 31, 2002, it held 52.0 percent of internally managed small cap stocks in the information technology sector. That was nearly three times the weight of the information technology sector in the Russell 2000, the Investment Board's benchmark for the small cap portfolio. The Investment Board correctly anticipated the information technology sector would benefit from increased business spending as the economy recovered during 2003.

The internal domestic public bond and the national private debt portfolios did not meet their five-year benchmarks at the end of 2003.

While several of the portfolios had successful performances during 2003, events of the last few years continued to affect longer-term returns for some of the portfolios. Domestic fixed-income portfolios were particularly sensitive to the consequences of the September 11, 2001 terrorist attacks, the corporate accounting scandals, and the recent market downturn that led to increased risk of bankruptcy or to actual bankruptcies of large corporations that had once been considered low credit risks. Specifically, the internal domestic public bond portfolio and the national private debt portfolio under-performed their five-year benchmarks at the end of 2003: the internal public bond portfolio had an average annual five-year return of 5.8 percent, compared to a benchmark of 6.3 percent, and the national private debt portfolio had a five-year return of 6.2 percent, compared to a benchmark of 6.8 percent.

The national private debt portfolio of private placements in non-Wisconsin companies was especially affected by past events and markets. At the time it decided to discontinue this portfolio, the Investment Board estimated approximately 20.0 percent of the portfolio had experienced or was being monitored for potential credit risk concerns. Among the troubled investments were loans to airlines, which experienced increased financial difficulties following the terrorist attacks. In addition to not providing sufficient return to compensate for the increased risks involved, the Investment Board concluded that the time and resource commitments needed to properly manage the portfolio could be better used for other fixed-income strategies.

The alternative investment class did not meet its benchmarks.

Finally, the alternative investment class under-performed its one-, five-, and ten-year benchmarks as of December 31, 2003. The average annual five-year return was 4.4 percent, compared to a benchmark of 10.2 percent, and the average ten-year return was 10.5 percent, compared to a benchmark of 12.6 percent. The Investment Board attributes the under-performance, in part, to a lack of a well-articulated investment strategy.

The under-performance is also attributable to troubled investments in the Opportunity Portfolio, which was the subject of our last management audit (report 01-18). The Opportunity Portfolio was established in 1995 to capitalize on domestic and international investment opportunities that did not easily match the objectives of the Investment Board's other portfolios. In 2001, we reported that the portfolio's returns were not meeting its benchmarks, highlighted troubled Korean investments, and identified the need for improved documentation standards for its due-diligence process.

The Investment Board has taken several steps to address these concerns and to implement the recommendations of an outside consulting firm it hired to review private equity and real estate investments. Among the major steps taken was combining all new private equity investments into one portfolio, to improve their management and oversight. Most recently, the Investment Board established the alternative asset class as a private markets group that includes, in addition to private equity, real estate and private debt in Wisconsin companies. As part of the reorganization process, several personnel changes have been made, including the resignation of two key management staff for the asset class. Because of the long-term nature of investments in the alternative asset class, the ultimate effectiveness of recent changes may not be known for several years.

Comparison to Other Public Pension Funds

Comparing the Fixed Retirement Trust Fund's performance to that of other public pension funds provides one perspective for assessing the relative effectiveness of the Investment Board's overall investment strategy and asset allocation decisions. However, in making such comparisons, the possible effect that different liability streams, asset mixes, investment styles, tolerable risk levels, and statutory or other restrictions on allowable investments can have on performance also needs to be kept in mind. Furthermore, the equities option that Wisconsin offers its retirement system participants through the Variable Retirement Trust Fund appears to be unique among public pension funds and, therefore, can affect comparisons.

The Fixed Retirement Trust Fund's five-year average annual returns ranked first among ten public pension funds surveyed.

One-, five-, and ten-year average annual investment returns for the Fixed Retirement Trust Fund and nine other public pension funds for periods ending December 31, 2003, are shown in Table 8. The Fixed Retirement Trust Fund's five-year average annual returns ranked first among the ten funds surveyed, while the Fixed Fund's one-year return ranked third and its ten-year return ranked eighth.

Table 8

Comparison of Pension Funds' Overall Average Annual Rates of Return
(For Periods Ending December 31, 2003)

	Five-Year		One-Year		Ten-Year	
Pension Fund	Return	Rank	Return	Rank	Return	Rank
Wisconsin Investment Board Fixed Retirement Trust Fund	**4.9%**	**1**	**24.2%**	**3**	**9.1%**	**8**
Washington State Investment Board[1]	4.7	2	19.8	10	9.3	5
Pennsylvania Public School Employees Retirement System	4.6	3	25.3	1	9.3	5
Virginia Retirement System[1]	4.6	3	24.3	2	9.6	2
California Public Employees Retirement System	3.8	5	23.3	5	9.1	8
Teachers Retirement System of Texas	3.5	6	23.3	5	9.4	3
Florida State Board	3.4	7	23.4	4	9.4	3
Minnesota State Board[1]	3.0	8	23.3	5	8.9	10
New York State Teachers Retirement System	2.9	9	22.8	8	9.7	1
New Jersey Division of Investments	2.6	10	21.2	9	9.3	5

[1] Returns shown are net of costs because gross returns were not available. Gross returns are shown for the other retirement systems.

The Fixed Retirement Trust Fund's ranking relative to other public pension funds has improved significantly since our previous management audits. For example, in 2001, the Fixed Fund's five-year return had ranked last among the same group of peers. The improvement in ranking is related, in part, to the Fixed Fund's relatively smaller allocation to domestic equity investments. This difference from seven of the other public pension funds resulted in smaller losses for the Investment Board as U.S. markets declined during the three years ending December 31, 2002.

The Fixed Retirement Trust Fund's quarterly returns were less volatile than those of other surveyed pension funds.

Investment performance among pension funds can also be compared based on volatility or consistency of returns over time, measured by how widely periodic returns vary from the average. A pension fund's tolerance for volatility is partly a function of funding priorities. For example, funding priorities for the Wisconsin Retirement System are consistent earnings and employer contribution rates. Therefore, the Investment Board develops its investment strategy with a goal of minimizing volatility. Based on five years of quarterly returns for the Fixed Retirement Trust Fund and eight of the other public pension funds surveyed, the Fixed Fund had the lowest level of volatility for the period ending December 31, 2002. (Quarterly data were not available for one of the surveyed plans.) According to Investment Board reports, this ranking did not change for the period ending December 31, 2003.

The Fixed Retirement Trust Fund's lower volatility level may be related, in part, to its lower equity allocation at the end of 2002 than six of the other surveyed pension funds. In determining the Fixed Fund's equity allocation, the Investment Board considers the availability of the Variable Retirement Trust Fund to those Wisconsin Retirement System participants interested in increasing their equity exposure. More than 106,000 participants, or approximately 21.2 percent, are invested in the Variable Retirement Trust Fund, which consists of equity investments. Based on ending asset balances for 2003, participants who elected to place 50.0 percent of their contributions into the Variable Retirement Trust Fund had approximately 80.4 percent of their 2003 contributions invested in equity investments, compared to 62.6 percent for participants solely in the Fixed Retirement Trust Fund.

■ ■ ■ ■

Investment Management Costs ■

In addition to its own operating costs, the Investment Board incurs costs for the services of external managers and advisors who supplement staff resources or provide expertise that would otherwise not be available. Both internal and external Investment Board costs have increased in the past five years, but external investment costs—which are largely unlimited—have increased more significantly. In 2003, they represented 89.5 percent of the Investment Board's total costs.

Although the Investment Board has a level of budgetary freedom that is not available to other state agencies, its current budgetary structure may not be promoting optimal use of retirement system resources or providing the level of accountability over investment costs that the Legislature desires.

External Management Costs

Investment Board costs increased 79.3 percent in five years.

In the five-year period shown in Table 9, total Investment Board costs increased $69.3 million, or 79.3 percent, to reach $156.7 million during 2003. A $65.3 million increase in external investment costs represented 94.2 percent of the total increase.

Table 9

Investment Board Costs
Calendar Years 1999 through 2003
(In Millions)

	1999	2000	2001	2002	2003	Change (1999-2003)	Percentage Change
Internal Operating Costs[1]							
Salaries and Fringe Benefits	$ 8.2	$ 11.2	$ 11.3	$ 13.3	$ 13.2	$ 5.0	61.0%
Supplies and Permanent Property	4.3	3.9	3.4	2.9	3.3	(1.0)	(23.3)
Internal Operating Expenses Subtotal	**$12.5**	**$ 15.1**	**$ 14.7**	**$ 16.2**	**$ 16.5**	**$ 4.0**	32.0
External Investment Costs[2]							
External Investment Manager Fees	$51.5	$ 62.6	$ 86.1	$ 93.6	$107.2	$55.7	108.1%
Real Estate Advisory Fees	16.6	17.7	19.2	21.8	20.7	4.1	24.7
External Support Services	5.8	6.8	8.6	10.4	12.0	6.2	106.9
Soft Dollars[3]	1.0	0.7	0.5	0.3	0.3	(0.7)	(70.0)
External Investment Expenses Subtotal	**$74.9**	**$ 87.8**	**$114.4**	**$126.1**	**$140.2**	**$65.3**	87.2
Total	**$87.4**	**$102.9**	**$129.1**	**$142.3**	**$156.7**	**$69.3**	79.3

[1] Portion of costs that are limited by appropriations of the Legislature and include personnel costs associated with all 104.5 Investment Board staff.
[2] Portion of costs that are directly charged against investment earnings, with the exception of soft dollars.
[3] Soft dollars are credits used to purchase research and other services in exchange for using brokers to trade securities.

Costs for externally managed investments were more than triple the costs for internally managed investments.

As noted, external managers and advisors can provide expertise that is not available internally, or otherwise supplement internal staff resources. However, external management costs are typically higher than internal management costs. For example, a study issued in July 2004 by Cost Effectiveness Measurement, Inc., which conducts annual surveys of pension funds, concluded that external management costs accounted for a slight but consistent difference between the Investment Board's costs for the Fixed Retirement Trust Fund and the mean for a group of 17 public pension funds with comparable amounts of assets under management. In 2003, the Investment Board's costs were $0.28 per $100 under management, compared to a peer mean of $0.24 per $100. The Investment Board's average cost for externally managed assets was $0.32 per $100 under management, which is more than triple its average cost for internally managed investments, which was $0.09 per $100 under management in 2003.

Table 10 summarizes the external investment manager and advisor fees the Investment Board paid in 2003. More than $102.3 million, or 79.9 percent of the total shown, was paid for external management of private equity and real estate investments and for quantitative funds.

Table 10

Summary of External Investment Manager and Advisor Fees
Paid During 2003
(In Millions)

Manager	Asset Class	Total 2003 Fees	Average Assets Managed[1]	Fees per $100 of Assets Managed
Private Equity (various)[2]	Alternative Limited Partnerships	$ 44.9	$ 1,479	$3.03
Barclays Global Investors	Quantitative Funds	36.7	11,207	0.33
Real Estate (various)[2]	Real Estate Limited Partnerships	20.7	1,181	1.75
Morgan Stanley	International Equity	4.6	1,579	0.29
Barclays Global Investors (Passive)	Passive Index Funds	4.0	14,513	0.03
Capital Guardian	International Equity and Global Fixed Income	3.8	1,197	0.32
Grantham, Mayo, Van Otterloo	Quantitative Domestic Equity, Emerging Equity, and Emerging Fixed Income	3.3	914	0.36
Baillie Gifford	International Equity	2.6	1,099	0.24
Morgan Grenfell	Global and Emerging Fixed Income	2.0	553	0.36
UBS Multi-Asset[3]	Multi-Asset Fund	1.1	328	0.44
Brinson Partners	Global Fixed Income	0.9	452	0.20
T Rowe Price[3]	Emerging Equity	0.8	204	0.94
Salomon Brothers	Emerging Fixed Income	0.7	161	0.45
Northwestern Mutual Life	Domestic Fixed Income (mortgages)	0.4	653	0.07
Boston Co.[3]	Emerging Equity	0.4	102	0.96
Baker[3]	Quantitative Domestic Equity	0.2	218	0.47
Loomis Sayles High Yield[3]	Global Fixed Income	0.1	200	0.25
Brandywine Global[3]	Global Fixed Income	0.0	204	0.17
Bridgewater Global[3]	Global Fixed Income	0.0	204	0.14
Other	Cash management, etc.	0.7	n/a	n/a
		$127.9		

[1] Average assets under management during 2003, calculated by averaging the beginning and ending asset balances during the year.
[2] Assets include limited partnerships only.
[3] Assets for these managers were not averaged since they either began or terminated the portfolios during 2003. Fees per $100 managed were calculated on estimated annual fees, not 2003 fees.

Private Equity and Real Estate

Over one-half of manager and advisor fees were for private equity and real estate investments.

Fees paid for private equity and real estate investments are among the most costly, both in terms of total dollars and on a per-dollar-of-asset-value basis. In 2003, they significantly exceeded other fees on a per asset basis. On average, fees for private equity investments were $3.03 per $100 invested, and real estate fees were $1.75 per $100 invested. In comparison, average fees for passively managed index funds were $0.03 per $100 managed.

The fees for private equity and real estate investments are largely associated with limited partnerships, in which the Investment Board provides funds to a general partner or a real estate advisor who is responsible for selecting and managing specific investment opportunities. Managers also share in the profits generated by the investments.

Like many other large public pension funds, the Investment Board invests in real estate and private equity investments as part of its efforts to diversify and seek potentially higher returns. Limited partnerships are used primarily because of the limited availability of internal resources for these staff-intensive investments. However, the relatively higher costs associated with these types of investments suggest that the Investment Board needs to regularly evaluate these investments' value in relation to other investment options. Such an assessment is especially important for the private equity portfolios, for which returns have been significantly lower than benchmarks and which have experienced continued internal personnel and operational difficulties.

Quantitative Funds

Fees for quantitative funds represented 31.0 percent of external manager fees in 2003.

Fees for quantitative funds totaled $39.6 million and represented 31.0 percent of external manager fees in 2003. On a per asset basis, they are less than fees for private equity and real estate investments but represent a significant increase over fees for indexed funds. Therefore, the added value they provide to the retirement funds should also be regularly reviewed.

For several years, the Investment Board has invested in passively managed index funds, which attempt to mirror the composition and performance of specific indices. The passive index funds, which are managed by Barclays Global Investors and had fees totaling $4.0 million during 2003, represent a relatively less-costly investment management option available to the Investment Board, because minimal research and transaction costs are incurred once an index fund is established.

As noted, the Investment Board began to expand upon the indexing option in 1998 by initiating enhanced indexing or quantitative approaches, which attempt to earn excess return primarily through quantitative analysis. Investments are made using proprietary computer models to evaluate particular stocks. Substantial amounts of information about individual companies, market segments, and economic trends are typically gathered and analyzed in this automated process. Initially, the Investment Board contracted with two external managers for help in establishing a quantitative investment approach with a relatively small amount of funds. In 2000, it made a major shift to the quantitative approach by moving $7.0 billion from the passive index funds to quantitative funds managed by Barclays Global Investors.

The Investment Board's investment in quantitative funds was one of the largest among pension funds at the end of 2003.

Like the passive index funds, the quantitative funds aim to track an index. However, quantitative funds may also depart from the index in an attempt to earn excess returns using quantitative analysis. The Investment Board presently invests in seven quantitative funds that are managed by Barclays Global Investors and that track several different stock and fixed-income indices. An industry periodical reported that the Investment Board's investment in quantitative funds was one of the largest among pension funds at the end of 2003.

Unlike the fixed fees that have been typical in past external management arrangements, the fees for quantitative funds have two components: a base management fee, and a performance fee. The base fee is calculated on the market value of assets under management. If the fund exceeds established performance thresholds, the fund manager also shares in the excess return through performance fees, although total fees are capped. Under such fee structures, the Investment Board typically pays less for funds that do not perform well, but it also pays significantly higher fees for funds that exceed performance thresholds.

Quantitative fund fees were 11 times more costly than index fund fees.

Fees for the seven Barclays Global Investors quantitative funds totaled $36.7 million and represented 28.7 percent of the external manager fees for 2003. As was illustrated in Table 10, with an average fee of $0.33 per $100 of assets invested, the quantitative funds were 11 times more costly than the average fee of $0.03 per $100 of assets invested in Barclays Global Investors' passive index funds. Furthermore, approximately 75.1 percent, or $27.6 million, of total fees paid for the seven quantitative funds in 2003 was associated with the three quantitative funds initiated in 2000 and 2001 for large cap, small cap, and international stocks. That amount includes $23.3 million in performance fees based on excess returns provided by these three funds. As shown in Table 11, two of these funds significantly exceeded their benchmarks in 2002; however, their performance was much less impressive during 2003.

Table 11

Performance for Selected Quantitative Funds
One Year Ended December 31, 2002

Quantitative Fund	Return	Benchmark	Percentage Point Difference
Small Cap Stock	(15.7)%	(20.5)%	4.8
International Equity	(11.4)	(15.8)	4.4
Large Cap Stock	(21.2)	(22.1)	0.9

One Year Ended December 31, 2003

Quantitative Fund	Return	Benchmark	Percentage Point Difference
Small Cap Stock	47.2%	47.3%	(0.1)
International Equity	40.7	39.4	1.3
Large Cap Stock[1]	n/a	n/a	n/a

[1] The large cap stock quantitative fund was restructured in 2003, so comparable data are not available.

Renegotiations with external managers have reduced fees.

While quantitative funds have added value to the retirement funds, costs for these funds will potentially increase with increases in assets under management. The Investment Board recognizes the need to control costs and, as the result of an internal audit, it renegotiated external manager fees in 2001. In 2003, it renegotiated fees again, with a focus on the quantitative funds. Negotiated reductions in fees for all Barclays Global Investors quantitative funds are expected to provide annual savings of approximately $4.2 million. In addition, during 2004 the Investment Board eliminated the performance fee component in exchange for a higher base fee for one of its quantitative funds, which it estimates will provide savings of $6.2 million over the next fiscal year.

While the Investment Board told us it intends to remain diligent in its evaluation and renegotiation of external manager fees, it also needs to regularly evaluate the overall cost-effectiveness of performance-based fee arrangements. For example, we estimate that under the performance-based fee structure, fees paid in 2002 for the three top-performing quantitative portfolios may have been as much as $11.0 million greater than the costs that would have been incurred under a more typical fixed management fee arrangement. However, it is difficult to measure the added long-term return that may have been achieved through the additional incentives provided by a performance-based fee arrangement. As noted, returns for three quantitative portfolios significantly exceeded benchmarks for the one-year period that ended December 31, 2002, but did not generally achieve the same level of success for the one-year period that ended December 31, 2003.

Some portfolio results for 2003 do not significantly differ from the returns that may have been realized from employing an indexed approach. However, even if a quantitative fund does not provide excess returns, its base fees still exceed those for an index fund because a manager incurs more costs to manage a quantitative portfolio than an index portfolio. For example, based on the fee structure in place during our review, we found that the base fee for a passively managed fund of large cap stocks was $0.015 per $100 managed, while the base fee for a quantitatively managed fund of large cap stocks was $0.15 per $100 managed. Further, the Investment Board should regularly evaluate whether other investment management options, such as internal management or use of active external managers, may provide more cost-effective options for consistently achieving excess returns.

☑ Recommendation

We recommend the State of Wisconsin Investment Board evaluate and, in its annual report to the Legislature, report on the cost and added value provided through its quantitative funds compared to other investment options, such as index funds or fixed-fee arrangements.

Costs for External Support Services

External support services costs $12.1 million during 2003.

In addition to the costs of external managers and advisors, the Investment Board also directly charges the costs of a variety of external support services that are associated with the management of investments against income from those investments. In 2003, these costs totaled $12.1 million and represented 7.7 percent of its total costs. As shown in Table 12, these costs also have doubled from 1999 through 2003. Most generally appear reasonable, but the circumstances of at least one consulting relationship suggest that the Investment Board could be more diligent in contracting for consulting services.

Table 12

Other External Investment Costs
Charged to Current Investment Income
1999 through 2003

	1999	2000	2001	2002	2003	Percentage Change
Custodial Bank Fees	$3,722,922	$3,742,714	$3,880,895	$ 3,664,274	$ 3,252,372	(12.6)%
Consultant and Speaker Fees	677,495	855,397	1,453,313	2,787,713	3,905,768	476.5
Legal Fees	415,318	657,190	1,149,844	1,275,722	1,418,248	241.5
Electronic Research Services	1,027,553	1,495,969	2,152,317	2,683,820	3,483,549	239.0
Total External Support Costs	**$5,843,288**	**$6,751,270**	**$8,636,369**	**$10,411,529**	**$12,059,937**	106.4
Soft Dollars[1]	$1,026,912	$ 707,447	$ 499,458	$ 259,613	$ 362,399	(64.7)

[1] Soft dollars are credits used to purchase research and other services in exchange for using brokers to trade securities.

The most consistent support costs are custodial fees paid to banks that provide the Investment Board with services such as custody of assets, trade management, cash handling, and accounting. While costs associated with custodial banks declined from 1999 through 2003, costs for electronic research services increased from $1.0 million in 1999 to $3.5 million in 2003. A large part of this increase can be attributed to the corresponding decline in soft dollars available to pay for these costs. Soft dollars represent credits the Investment Board receives for performing trades with certain brokers. Over the years, these credits have been used to purchase electronic research services, investment publications, institutional memberships, and other miscellaneous items. As the Investment Board has shifted a larger portion of investments to external managers, the decline in soft dollars has been significant.

The Investment Board spent $1.4 million in legal fees in 2003.

The Investment Board also experienced significant increases in legal and consulting fees beginning in 2001. The increases in legal fees are largely attributable to increased litigation surrounding corporate fraud and bankruptcies, and to costs incurred to investigate troubled private equity investments. For example, $783,174, or 33.8 percent of legal fees in 2001 and 2002, related to fees paid to a legal firm that led the investigation into a troubled Korean investment that was discussed in our 2001 audit. The Investment Board reported that it recovered a total of $65 million from 1999 through 2003 as the result of legal actions it took.

Consulting costs have increased significantly over the five-year period shown in Table 12, most notably after 2000. From 2001 through 2003, the Investment Board engaged several new consultants for reasons that include contracting for temporary staffing while positions were vacant, conducting a national search for top investment staff replacements, and valuing fixed-income securities. However, the most significant increases in consultant costs were associated with two new contractual relationships.

The Investment Board paid a consulting firm $863,749 to evaluate its approach to alternative investments.

First, the Investment Board paid McKinsey Consultants, a firm that assists organizations in addressing strategic and operational challenges, $863,749 to conduct a study on how to restructure its alternative assets in light of problems with several of its private equity investments. This study was initiated in October 2001, as we were completing a review of alternative investments as part of a biennial management audit. The McKinsey study provided the Investment Board with a framework for its future investment in private equity and real estate, and the Investment Board implemented a majority of the study's recommendations. However, the Investment Board continues to work on establishing effective investment strategies and maintaining appropriate staff and consulting resources in this area.

The Investment Board did not fully use consulting services that cost $1.0 million annually.

Also in October 2001, the Investment Board entered into a three-year contract with Pathway Capital Advisors for almost $1 million annually to provide general advice, due-diligence assistance, data management, and reporting services related to private equity portfolios. The Investment Board did not fully use the services for which it had paid the consultant $2.4 million as of December 31, 2003. For example, the consultant was required to research and provide the Investment Board with 15 private equity investment options. However, at the time of our fieldwork, private equity staff had not invested in any of the options provided. They indicated that the services were contracted primarily to assist in monitoring and reporting of existing limited-partnership investments when an internal position was vacant. The Investment Board has since filled the vacant internal position, and it recently underwent another procurement process to hire a different consultant to assist with private equity investments.

The Investment Board is not required to follow state procurement requirements to purchase investment management services charged directly to investment income, such as the services procured from McKinsey Consultants and Pathway Capital Advisors. However, in selecting Pathway, the Investment Board did go through a competitive bidding process. In addition, the contracts were subject to internal review and approval by senior managers. Nevertheless, it is unclear whether the Investment Board fully evaluated whether a less-expensive option may have been available to meet its needs. Recently, the Board of Trustees has begun to increase its oversight of the Investment Board's contracts. For example, trustees receive regular reporting of new contracts and were advised and consulted in the recent competitive bidding process for the new private equity consultant contract.

☑ Recommendation

We recommend the State of Wisconsin Investment Board continually evaluate its contracting procedures to ensure that it is diligently analyzing and justifying the need for consulting services.

Future Considerations

The Investment Board's internal budget is limited by a statutory formula and the number of staff authorized. The percentage of investments that may be externally managed is also limited by statute. In light of increasing costs and increasing use of external managers and advisors, changes to these limits may be warranted to further promote the most effective use of resources and to provide increased accountability over a larger portion of the Investment Board's costs. More detailed reporting requirements also may be useful to the Legislature and others in further understanding the Investment Board's external management costs.

Internal Operating Budget

Instead of a set dollar amount, the Investment Board's annual operating budget is indexed to 0.0275 percent of assets managed, based on total assets as of April 30 of the preceding fiscal year. This budget change was enacted as part of 1999 Wisconsin Act 9 and based on the premise that increases in investment value may require additional operational support to manage. To protect against a significant market decline, a minimum annual base of $17,720,500 was authorized for the Investment Board's operating budget. The Legislature also controls the number of authorized positions at the Investment Board, as it does for other state agencies.

When markets declined, the Investment Board's operating budget decreased to the statutory floor.

As shown in Table 13, the Investment Board's authorized operating budget increased from $12.3 million for fiscal year (FY) 1998-99 to $19.6 million for FY 2000-01. However, because of the decline in asset value that resulted from declining markets, the Investment Board's budget authority declined to $18.7 million for FY 2001-02 and was at the statutory floor of $17.7 million for FY 2002-03 and

FY 2003-04. With the rebound of assets to $70.5 billion in April 2004, its FY 2004-05 budget increased to $19.4 million, or almost the same level as for FY 2000-01.

Table 13

Authorized Operating Budget

Fiscal Year	Base Asset Level (In Billions)	Authorized Operating Budget (In Millions)
1998-99	n/a	$12.3
1999-2000	$64.4	14.5
2000-01	71.1	19.6
2001-02	67.9	18.7
2002-03	63.9	17.7
2003-04	59.7	17.7
2004-05	70.5	19.4

The Investment Board had a reserve of $2.8 million at the end of FY 2003-04, representing unspent bonus funds.

Spending levels for internal costs were less than the Investment Board's authorized budgets for FY 2000-01 and FY 2001-02, in large part because of the trustees' desire to phase in increases to bonuses. However, the Investment Board received permission from the Department of Administration to bill trust funds for the amount of its budget authority and to encumber unexpended bonus amounts for up to five years, because bonuses are associated with performance over a similar time period. At the end of FY 2003-04, the Investment Board had an outstanding encumbrance of $2.8 million for bonuses. Communications between the Investment Board and the Department of Administration suggest an understanding that these encumbered bonus funds will be used solely for the bonus program, and any remaining amounts will be returned to the trust funds that were pre-billed for unexpended amounts.

The encumbered bonus amounts helped the Investment Board to manage its lower budget level for FY 2002-03 and FY 2003-04. However, the Investment Board indicates that being at the minimum budget level for two fiscal years has affected its ability to seek increases in authorized staff positions to manage more investments internally and to achieve its goals in establishing competitive staff compensation levels. The growth in assets during 2003 will help to ease the budgetary pressures for FY 2004-05. However, minimal market growth in 2004 suggests the Investment Board will continue to be challenged in managing its internal operating budget and meeting internal goals for staffing and compensation in the near future.

Limits to External Management Authority

The Investment Board may contract for external management for up to 15.0 percent of the retirement funds.

At the same time the Investment Board's internal capacity to manage assets is limited by its operating budget, statutory provisions that were established to limit and provide accountability over external costs may not be fully meeting their original intent. Recognizing the value that external managers can add, the Legislature in 1987 first authorized their retention to invest a portion of retirement funds in real estate, mortgages, stocks, and the debt of foreign corporations and governments. 2003 Wisconsin Act 299 extended this authority to include all debt. Statutes also allow the Investment Board to invest in shares of commingled funds and in partnerships. However, in light of the higher costs and decreased control and oversight associated with external management, the Legislature established a statutory limit on the percentage of assets that may be externally managed. Currently, the limit is 15.0 percent of each of the retirement funds.

Active internal investment of retirement assets by Investment Board staff is declining.

Despite the 15.0 percent limit on external management, active management by the Investment Board's internal staff has declined from approximately 43.7 percent of assets as of December 31, 1999, to 36.5 percent as of December 31, 2003. Further, it is unclear whether the Investment Board's approach for defining the types of investments it considers for the 15.0 percent limit meets the intent of s. 25.18(2)(e), Wis. Stats.

The statutory language establishing the authority and limit on external managers refers to instances in which the Investment Board "contracts with and delegates to investment advisers the management and control over assets." In determining compliance with the 15.0 percent limit, the Investment Board considers only the portfolios that are actively managed by external managers with whom it has contracted and to whom it has delegated authority to determine the appropriate investment strategy and purchase individual securities in the Investment Board's name, within its own broad guidelines. As shown in Table 14, external investments meeting this definition were 10.1 percent of total retirement fund assets as of December 31, 2003. However, 53.4 percent of retirement fund assets were invested in other external investments that did not meet the Investment Board's definition.

Table 14

Composition of Assets Managed Using Internal and External Resources
December 31, 2003

Investment Strategy	Assets (In Millions)	Percentage
External Active Managers as Defined by the Investment Board	$ 6,338	10.1%
Other External Assets		
Index Funds	16,581	26.4
Quantitative Investments	13,449	21.4
Limited Partnerships	2,702	4.3
Actively Managed Commingled Funds	836	1.3
Subtotal—Other External Assets	**33,568**	**53.4**
Internal Assets	22,923	36.5
Total Retirement Fund Assets	$62,829	100.0%

As noted, the Investment Board pays a significant amount of management fees for passive index funds, quantitative funds, and limited partnerships. These investments are not considered in its calculation of the external manager limit, on the premise that the decision to invest in these funds is based on the Investment Board's own knowledge and acceptance of their investment strategies. In addition, the external managers do not purchase individual securities in the Investment Board's name; rather, the Investment Board invests in the funds or limited partnerships.

The Investment Board has different levels of control over these different types of external investments. On one end of the spectrum are passive external index funds, for which it may be reasonable to presume that the Investment Board does maintain control over the investment strategy, since the strategy is dictated by the composition of a specific index. On the other end of the spectrum are active external managers for international investments in which investment strategy and decisions are left to the managers, with limited input by the Investment Board. In between are the quantitative funds, private equity and real estate funds, and limited partnerships, in which the Investment Board agrees to a general strategy being undertaken but typically has limited control or input into individual investment decisions.

The investment environment has changed since the statutory limitation on external management was first established.

The numerous changes that have occurred in investment markets and the Investment Board's strategies since the statutory definition and limit for external management were first established also may affect the applicability of the provision in the current environment. In 1987, the Investment Board primarily invested in domestic equities and fixed-income securities that were actively managed by internal staff. External management authority was provided to allow investment in real estate and international markets, in which the Investment Board did not have expertise at the time. However, as it and the investment markets have developed, different investment strategies and opportunities have evolved, many of which may not have been envisioned by the Legislature or the Investment Board. For example, the quantitative funds represent a relatively new investment strategy.

If the Legislature chooses to reconsider the continuing appropriateness of the current statutory definition and limitation on external management, it also may wish to re-evaluate more broadly the current budgetary structure. As noted, internal management of assets often costs less than external management. In some cases, it is more effective to use external management, especially in markets and investments in which the Investment Board does not have sufficient expertise. However, under the current budgetary structure, the Investment Board's decisions to manage assets internally or externally are not necessarily based on the most cost-effective options available. Instead, the available funding and staffing authority are often key factors in the decision process.

In light of the Investment Board's increasing costs, the Legislature may wish to consider making changes to the current budgetary structure to further promote the most effective use of resources and to increase accountability over a larger portion of the Investment Board's costs. The Investment Board notes that it may in the future need to request increases in the statutory floor budget for internal operating costs and additional staffing authority. While increases in the internal operating budget could allow for increased use of internal resources, they do not address the limited accountability currently in place over externally managed assets.

Another alternative that has been suggested in the past is the establishment of an overall budget that would encompass all of the Investment Board's costs, rather than internal operating costs alone. Like the current budget for internal operating costs, the authorized budget level could correspond to the value of assets under management. The Legislature could either maintain control over the number of authorized positions or allow the Investment Board flexibility in determining the appropriate staff size to implement internal investment strategies. A total budget concept would allow the Investment Board more flexibility to use internal investment strategies, but it could also provide increased accountability over all costs. Depending on its priorities, the Legislature could maintain a statutory limit on external managers under the total budget concept. However, it also may wish to consider whether it is satisfied with the Investment Board's interpretation of the statutory limit and, if not, clarify the limit in statute.

While the Investment Board agrees that current statutory controls make it difficult to make the most cost-effective decisions, it believes that a total budget concept could limit its ability to respond quickly to new investment opportunities or changes in investment management strategies. It recently began a project, which it plans to complete in spring 2005, to analyze the optimal mix of investment approaches and identify related statutory changes that may be needed to achieve that mix. The Legislature may wish to consider the results of the Investment Board's project as it deliberates changes to the statutory limits.

Reporting Requirements

While the Legislature does not limit the amount of investment costs the Investment Board may incur and charge directly to investment income, it does seek some level of accountability by requiring quarterly reports detailing investment costs. Statutes require detailed cost information related to:

- employment of special legal or investment counsel in any matter arising out of the scope of the Investment Board's investment authority; and

- employment of professionals, contractors, or agents to evaluate or operate any property in which the Investment Board has an interest or is considering purchasing or lending money based upon the value of that property.

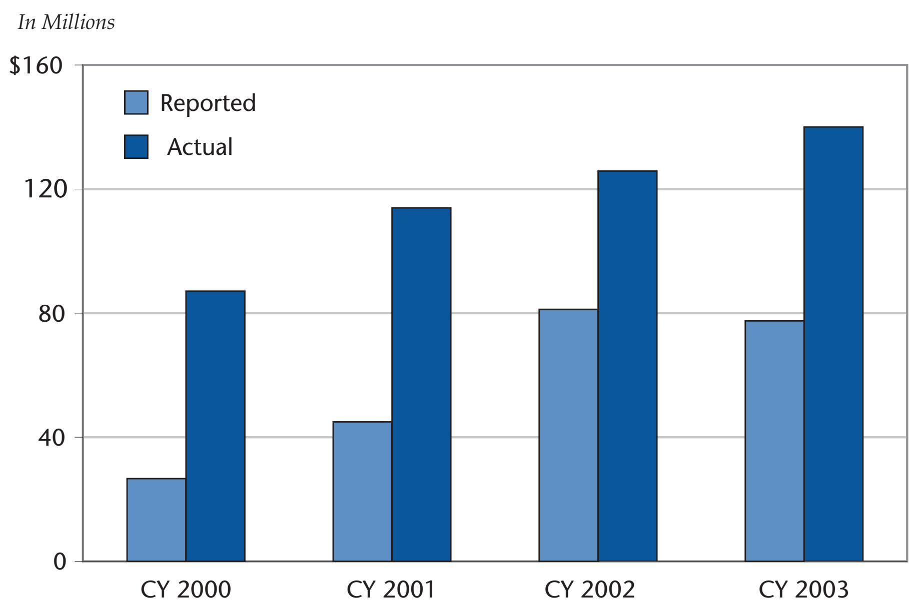
The Investment Board's interpretation of costs that fall under these statutory provisions includes custodial and banking fees, legal fees, consulting fees, electronic services fees, real estate advisory fees, and index and quantitative fund fees. However, the Investment Board does not report active external management fees or private equity fees, because they are paid under separate statutory provisions that are not covered by the current reporting requirements.

Not all external costs are included in quarterly cost reports to the Legislature.

As shown in Figure 4, the Investment Board's quarterly reports provided information on less than one-half of the investment costs charged directly against investment income during 2000 and 2001. With the implementation of the quantitative funds, a larger portion of the costs were reported in 2002 and 2003, although more than 44.6 percent, or $62.5 million, of 2003 costs still were not reported.

Figure 4

Reported versus Actual External Investment Costs



If the Legislature believes more detailed reporting of investment costs would be helpful to understanding the Investment Board's operations and costs, it may wish to broaden s. 25.17(13m), Wis. Stats., to include all external investment costs, and not just those incurred under ss. 25.18(1)(a) and (m), Wis. Stats. We also believe the Investment Board could make its quarterly reporting of costs more complete and understandable. The nature of some of the broad categories used to report cost information is not always self-evident. For example, the investment consultant category can include a wide range of consulting services that would not be evident to users of the information who are not familiar with the firms' names.

☑ Recommendation

We recommend the State of Wisconsin Investment Board include in its quarterly reports to the Legislature all costs directly charged against investment income and that it provide more descriptive information regarding the nature of these costs.

■ ■ ■ ■

History
The Bonus Program
Compensation Levels
Effect on Investment Staffing
Rewarding Meritorious Performance

Compensation Plan ▪

Compared to external management costs, staff compensation costs represented only a small portion—8.4 percent—of the Investment Board's total costs during 2003. However, compensation costs have increased significantly since 1999, when statutory changes increased both compensation and funding flexibility. In an effort to recruit and retain qualified investment staff, the Investment Board's compensation plan has been restructured to provide significant increases in salaries and bonuses. However, the Investment Board's compensation plan should also serve as an incentive for superior performance.

History

The current compensation plan is limited only by the Investment Board's overall budget authority. Previous plans had operated under statutory parameters that covered both investment and support staff. Past statutory provisions had limited the total bonus pool to 10.0 percent of annual salaries, and an individual bonus to 25.0 percent of the person's annual salary. In addition, past statutes required that bonuses be paid out over a three-year period to encourage staff retention. As part of the Investment Board's guidelines, investment staff were eligible for 85.0 percent of the bonus pool if the Fixed Retirement Trust Fund met its five-year benchmark, and the remaining 15.0 percent was available for support staff. If the five-year benchmark was not met, support staff were not eligible for any bonus, and only one-half of the bonus pool was available for investment staff.

The Legislature first authorized the Investment Board to establish a bonus program in 1987.

In the late 1980s, the Investment Board began to seek additional flexibility in hiring and compensation so that it could compete more effectively with private investment organizations for qualified and experienced staff. In response, the Legislature enacted 1987 Wisconsin Act 399, which authorized the Investment Board to change all but clerical positions to unclassified status and to establish a bonus program for meritorious performance. In response to concerns we raised in 1991 (report 91-10) about bonuses being used as supplements, and not as rewards for meritorious performance, the Legislature subsequently required the Investment Board to define eligibility and performance criteria for its bonus program.

Statutory limits for the bonus program were eliminated by a partial gubernatorial veto in 1999.

In 1999, the Investment Board requested changes in its previous budget and compensation authority because it was experiencing a significant loss of investment staff to the private sector, along with difficulty recruiting experienced investment staff. As noted, 1999 Wisconsin Act 9 changed the Investment Board's budget from a set dollar amount to one based on the value of assets under management, which increased funding for internal operations from $12.3 million for FY 1998-99 to a minimum of $17.7 million. As the result of a gubernatorial veto, Act 9 also eliminated all of the statutory provisions that established legislative parameters and requirements for the bonus program. During the 1999-2001 biennial budget process, the Governor recommended increases to the statutory bonus pool and individual bonus maximums, but the Legislature instead deleted the bonus program and related statutory provisions, and opted to provide additional funding to enhance salaries. The Governor's partial veto of Act 9 retained the Investment Board's authority to award bonuses, but without any limits.

The Investment Board's goal is to provide compensation comparable to that of banks and insurance companies.

In November 1999, following the enactment of Act 9, the Board of Trustees created the Compensation Committee and hired a compensation consultant to assist in developing a new compensation plan. The consultant established a peer group as a comparative base for evaluating the Investment Board's compensation levels and developing a target range for compensation increases. The peer group includes primarily banks, insurance companies, fund managers for corporate trusts, and foundations. Other large public pension funds were excluded because the Investment Board had not typically lost staff to these employers. East and west coast investment firms were also excluded to provide a conservative measure of compensation offered to investment professionals in the marketplace.

In 2000, the consultant reported that the Investment Board's total cash compensation level for investment staff, including base salaries and bonuses, was approximately 53.0 percent of its peer group's median compensation level. Non-cash compensation and other fringe benefits, such as health and other insurance benefits, retirement benefits, and stock options, were not included in the comparison. In response, the trustees established a long-term objective of increasing compensation levels to the peer group median and opted to allocate the additional funding evenly between base salaries and bonuses.

The Bonus Program

The current bonus program generally provides larger and more immediate bonuses for investment staff.

The current bonus program for investment staff was instituted in November 2000. As shown in Table 15, it generally awards larger bonuses and provides more immediate payments to investment staff than under the previous program. Bonus provisions for support staff have not changed.

Table 15

Comparison of Previous and Current Bonus Program for Investment Staff

Program Provision	Previous Bonus Program	Current Bonus Program
Limitation on bonus pool	Statutory limitation of 10.0 percent of investment staff salaries	No statutory limitation. Instead, the maximum bonus pool is determined by the Investment Board based on overall budgetary considerations. (Actual experience: from 15.3 to 27.5 percent)
Limitation on individual bonus amounts	Statutory limitation of 25.0 percent of investment staff's annual salary	No statutory limitation. The Investment Board establishes individual bonus target ranges by position based on the peer group data compiled by its compensation consultant.
Distribution period	Statutory requirement that bonuses are paid over a three-year period.	Bonuses are paid in a single, lump-sum payment.

Bonuses are based on quantitative and qualitative factors.

The current bonus program for investment staff incorporates both quantitative and qualitative components, which are illustrated in Appendix 3. Investment staff who meet or exceed benchmarks for their relevant portfolios, are eligible for the quantitative component of the bonus. The quantitative component is complex and calculated based on four performance factors for one-, three-, and five-year periods, with most weight given to five-year performance. The four factors incorporate several aspects of investment performance that were not considered in the previous program, including level of risk, value added, and consistency over time. The smaller qualitative component of the current bonus program awards the achievement of defined performance factors that are not measurable through investment performance, such as training and mentoring of staff, contributing to organizational strategic planning, or participating in projects to upgrade information systems or electronic analytical tools.

Ten percent of the bonus pool is available to further reward top performers.

To further reward top-performing investment staff, the Investment Board budgets 10.0 percent of its bonus pool for distribution based on the percentage that each portfolio has contributed to the Fixed Retirement Trust Fund's five-year performance. Since the inception of this provision, a large portion of the 10 percent pool has been awarded for performance of the small-cap stock portfolio. For example, $60,761, or 53.1 percent, of the $114,423 distributed to investment staff for 2001 was awarded to the manager of the small cap stock portfolio, which exceeded its one-year benchmark by 29.6 percent during 2001 and more than doubled its five-year benchmark.

The bonus program allows discretion to reward investment staff who have not met benchmarks.

The bonus program allows discretion in the awarding of a bonus if a performance benchmark is not met but is determined to have been significantly difficult to achieve. To date, this discretion has been used in one instance. According to the Investment Board, mid-cap managers, in general, had difficulty meeting their benchmarks in 2001. Because the mid-cap stock portfolio missed its benchmark by small margins but also added value to the Fixed Retirement Trust Fund during certain periods, the portfolio manager and staff were given bonuses for 2001 performance.

According to its compensation consultant, the Investment Board's focus on benchmarks is similar to other public pension plans and companies in its peer group, primarily banks and insurance companies: if benchmarks are met or exceeded, bonus levels tend to remain relatively stable. In contrast, mutual funds and others that also consider profit levels in establishing base bonus payments tend to offer comparatively higher bonuses than the peer group in periods of strong markets, but lower bonuses during market downturns. A 2003 survey conducted by the Association of Investment Management and Research, a nonprofit membership organization of investment professionals, reported that average bonuses reported by U.S. members for 2002 decreased by 38.4 percent from the average bonuses reported for 2000.

Bonus programs are not universal among public pension funds.

Furthermore, while bonus programs for investment professionals are prevalent in the private sector, they are not universal among public pension funds. Information accumulated in a survey of statewide retirement systems conducted by the Missouri Employee Retirement System in 2002, indicate that approximately 20.0 percent of the 71 responding retirement systems provided senior managers with bonuses that were separate from those available through a state merit system.

We obtained information from six public pension funds that either have or recently had bonus programs, including those in Ohio, Pennsylvania, South Dakota, Virginia, New Jersey, and California. Four of the six public pension funds we surveyed based bonuses on both quantitative and qualitative factors. However, the Investment Board's bonus program appeared to be one of the most comprehensive and complex, and only two of the six pension funds formally or informally provided bonuses to support staff. In addition, two of the other pension funds provided bonuses only to top investment staff, such as executive directors and chief investment officers.

Compensation Levels

Compensation expenditures increased $5.0 million, or 61.9 percent, during the first four years the new compensation plan was in place.

Applying the new compensation plan and an increased flexibility in managing its operating budget, the Investment Board increased salaries immediately after the consultant's study was completed in April 2000. The first bonuses under the new plan were paid in November 2000, for FY 1999-2000 performance. As shown in Table 16, compensation expenditures increased $5.0 million, or 61.9 percent, during the first four years the new compensation plan was in place, from $8.2 million in 1999 to $13.2 million in 2003. A large portion of the increases in compensation expenditures are related to increased salaries and bonuses. The Investment Board also attributes part of the increase to having fewer staff vacancies in 2003 compared to 1999, and the ability to hire staff at higher levels of experience.

Table 16

Compensation Expenditures[1]
By Calendar Year

	1999	2000	2001	2002	2003	Percentage Change
Base Salary	$5,870,700	$ 7,307,900	$ 8,037,700	$ 8,728,000	$ 9,193,200	56.6%
Fringe Benefits	1,908,600	2,354,500	2,450,900	2,782,300	2,836,800	48.6
Bonus	352,300	1,508,400	785,100	1,552,700	1,030,700	192.6
Other Compensation	42,200	47,900	59,500	238,800	174,300	313.0
Total	**$8,173,800**	**$11,218,700**	**$11,333,200**	**$13,301,800**	**$13,235,000**	61.9

[1] Includes compensation expenditures for all staff, including four classified staff and limited-term employees.

Base Salaries

On average, individual staff base salaries increased 70.4 percent for investment staff and 50.1 percent for all unclassified staff from 1999 to 2003. As shown in Table 17, a significant portion of the increases occurred during 2000, the first year under the new compensation plan. In February 2004, the Board of Trustees approved average salary increases of 4.0 percent for 2004.

Table 17

Average Unclassified Base Salaries
1999 through 2003

Positions	1999	2000	2001	2002	2003	Percentage Change
Investment Positions						
Executive Director	$133,883	$199,447	$199,755	$208,961	$213,526	59.5%
CIOs/Investment Managers	110,691	169,680	173,382	180,436	197,327	78.3
Portfolio Managers	97,794	144,013	148,940	159,883	161,409	65.0
Assistant Portfolio Managers	74,228	84,324	81,784	98,776	97,806	31.8
Traders	64,180	85,560	87,959	86,414	95,813	49.3
Analysts	47,957	71,015	65,181	68,015	75,438	57.3
Other Investment Staff	42,546	52,146	56,550	57,944	64,771	52.2
All Investment Staff	66,182	98,452	98,702	104,582	112,802	70.4
Support Positions						
Managers	89,653	100,248	111,758	116,764	121,284	35.3
Directors	71,201	72,596	86,255	92,270	95,223	33.7
Accountants	41,087	45,264	46,306	48,043	49,479	20.4
Investment Support	34,234	37,848	40,501	41,156	44,505	30.0
Information Technology	44,220	48,387	48,208	49,384	53,686	21.4
All Support Staff	49,160	52,859	54,855	56,080	58,485	19.0
All Staff	58,657	79,062	79,717	83,660	88,064	50.1%

Over the last several years, salaries for top investment staff increased by a greater dollar amount and percentage than did other investment staff salaries. For example, the average salary increase for chief investment officers (CIOs) and investment managers was 78.3 percent from 1999 through 2003, compared to 57.3 percent for analysts, who complete research and assist in investment decisions. Senior managers were targeted for larger increases because the compensation consultant reported that their salaries lagged those in private sector by the largest margin. The Investment Board indicated that although it experienced more turnover among analysts than in senior investment management positions, layoffs and cutbacks of investment staff in the private sector had enabled it to limit salary increases at the analyst level during this period.

Bonus Awards

Bonuses paid in 2004 totaled $1.8 million.

Because of the removal of the statutory maximum for the total bonus pool, which had been 10.0 percent of salaries, total bonus payments have also increased. In 2003, they were $1,030,700, which is nearly triple the total of $352,300 paid in 1999. As a percentage of total annual salaries, bonuses awarded from 2000 to 2003 have ranged between 9.8 and 20.6 percent, compared to 6.0 percent in 1999. In March 2004, bonuses of $1.8 million were awarded for calendar year 2003 performance. That total represents 27.5 percent of investment staff salaries and 8.5 percent of support staff salaries.

Similar increases have occurred in individual bonus amounts. As shown in Table 18, average awards for all staff who received a bonus increased 84.1 percent, from $10,887 for FY 1998-99 performance to $20,047 for calendar year 2003 performance. The largest increases occurred in the first year of the new bonus program, which was for performance during FY 1999-00. Average investment staff bonuses increased 196.6 percent, from $10,887 to $32,292, and investment and portfolio managers received the highest increases in average bonuses. Support staff did not receive bonuses for FY 1998-99 because the Fixed Retirement Trust Fund did not meet its five-year benchmark. Their average bonuses then increased for three performance periods, declined for 2002, then rose again in the most recent bonus distribution for calendar year 2003 performance. Individual bonus payments to all staff for 2003 ranged from a high of $162,492 to a low of $0.

Table 18

Average Bonus Awards[1]
For Performance Periods FY 1998-99 through 2003

Positions	FY 98-99[2]	FY 99-00	July to Dec 2000[3]	2001	2002	2003	Percentage Change[4]
Investment Positions							
Executive Director	$ 0	$78,908	$40,000	$80,000	$ 50,000	$ 0	n/a
CIOs/Investment Managers	21,858	47,239	30,906	50,399	59,482	116,368	432.4%
Portfolio Managers	12,793	49,725	21,553	46,102	52,479	65,838	414.6
Assistant Portfolio Managers	11,352	18,955	8,554	16,588	18,739	25,275	122.7
Analysts	7,806	9,262	4,664	12,176	12,392	8,265	5.9
Traders	9,930	14,088	6,191	15,811	12,664	18,378	85.1
Other Investment Staff	4,892	6,881	3,956	9,614	7,179	9,487	93.9
All Investment Staff	10,887	27,085	13,043	26,933	28,580	32,292	196.6
Support Positions							
Managers	0	14,553	10,172	17,815	5,750	27,540	n/a
Directors	0	8,190	8,500	12,325	3,475	14,350	n/a
Accountants	0	1,974	2,200	3,300	1,600	4,046	n/a
Investment Support	0	1,861	1,634	2,959	1,463	3,501	n/a
Information Technology	0	2,934	2,250	4,256	1,400	4,479	n/a
All Support Staff	0	3,959	3,433	5,681	2,565	5,469	n/a
All Staff	10,887	17,301	8,891	17,252	18,083	20,047	84.1

[1] Average bonus award amounts are calculated based on the number of staff who received a bonus award.
[2] Support staff did not receive a bonus for FY 1998-99 because the five-year benchmark was not met.
[3] The Investment Board amended the bonus program to change from a fiscal year performance basis to a calendar year basis, and a separate bonus was awarded for the interim 6-month period.
[4] Reflects change between FY 1998-99 and calendar year 2003 bonus payouts. This change was not calculated for the Executive Director or support staff because the Board of Trustees did not award bonuses for the Executive Director in either of these years, and because support staff did not receive bonuses for FY 1998-99 because the five-year benchmark was not met.

Since implementation of the new bonus program, 11 bonuses have been larger than $100,000.

Furthermore, the removal of a statutory maximum on individual bonuses has allowed the Investment Board to award larger bonuses to investment staff. Since implementation of the new bonus program, 11 bonuses have been larger than $100,000, including six that were awarded for calendar year 2003 performance. In 10 of the

11 instances, the bonus exceeded 50 percent of the individual's salary. One individual bonus award of $181,030 for 2001 performance exceeded the individual's salary.

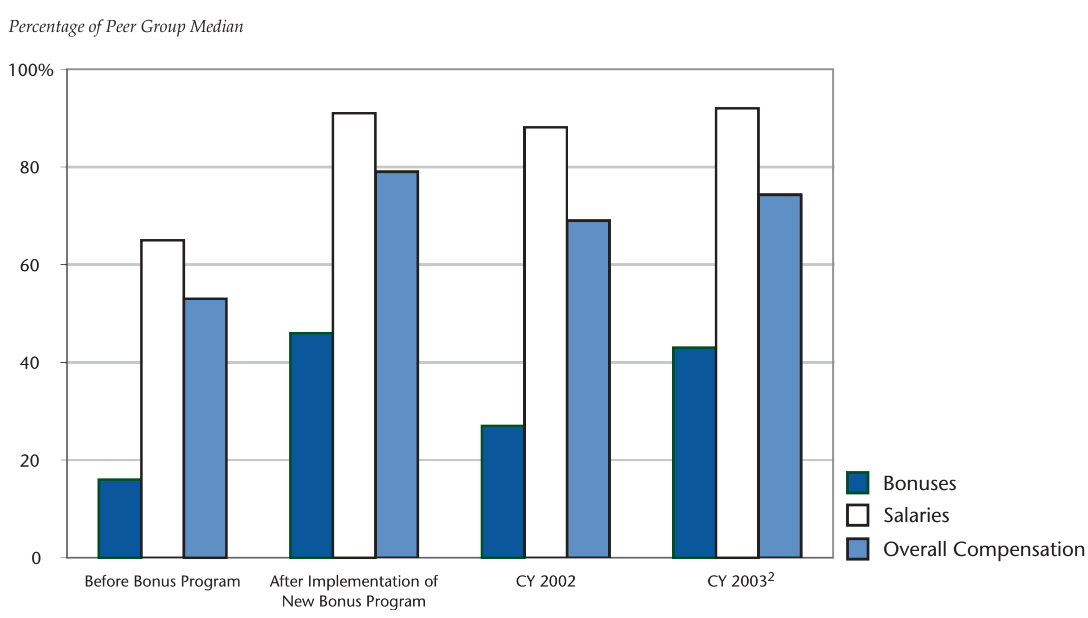
Comparison to Other Investment Professionals

The Investment Board has made progress in achieving the median compensation levels of its peer group.

By 2003, the Investment Board's overall compensation levels for investment staff, including salaries and bonuses, had increased under the new compensation plan to 74.3 percent of the median for its peer group of investment staff employed by banks, insurance companies, and corporate trusts, as determined in the compensation consultant's analysis of 2002 compensation levels of peer group. As shown in Figure 5, salaries increased from 65.0 percent to 92.0 percent of the peer group's median, but 2003 bonus payments were 43.0 percent of the peer group's median. However, they had been 16.0 percent of the peer group's median before the new bonus program was implemented. Providing bonuses comparable to the peer group's would have required bonus payments of at least $3.7 million, rather than the $1.6 million that was awarded to investment staff in 2004 for calendar year 2003 performance.

Figure 5

Investment Board Compensation Compared with Peer Group Medians[1]



[1] Determined by McLagan Partners Inc., the Investment Board's Compensation Consultant
[2] 2002 median compensation used for comparison to Investment Board's 2003 compensation levels.

While the Investment Board's compensation levels still lag those of its peer group in the private sector, they compare favorably to those of other public pension funds. In 2001, the compensation consultant compiled data from 12 other public pension funds and found that the Investment Board's total compensation levels were among the highest for several positions, including most in equity and fixed-income investments.

The Investment Board's compensation levels rank high compared to other public pension funds.

Similar results were seen in a 2002 survey conducted by the Missouri Employee Retirement System. Based on information provided by the 71 statewide retirement systems that responded to the survey, salaries for the Investment Board's top management positions, including the executive director, chief operating officer, chief investment officers, and chief legal counsel, were in the top 25^{th} percentile. Furthermore, the Investment Board's 2003 salaries for investment staff were more than 1.5 times higher than average pay ranges reported by *Pensions and Investments* in May 2004 for investment executives at 18 public funds.

Support Staff Compensation

Because the Investment Board considers support staff integral to its ability to achieve investment goals and believes bonuses are important to bringing in qualified and experienced support staff, support staff are included in its bonus program. However, some have questioned the equity of bonus programs that are not available to other state agencies being available to the Investment Board's support staff.

Compensation levels are generally comparable for the Investment Board's support staff and other state positions, especially when experience and complexity of responsibilities are considered. For example, in 2003, the salary and bonus for an Investment Board accountant with several years of experience totaled $51,832, while the State's salary range for a classified accountant position was $40,726 to $85,527. Similarly, the salary and bonus for an Investment Board information technology employee with several years of experience totaled $61,492 during 2003, while the State's salary range for a classified information technology position was $47,636 to $104,799.

Compensation for support management staff is nearing or exceeding salary ranges for comparable classified positions.

However, 2003 compensation levels for support staff in Investment Board management positions typically were at the top of salary ranges for comparable positions in classified state service, and in some cases they exceeded the range. Bonuses awarded in 2004 for calendar year 2003 performance will likely place the Investment Board's compensation levels for support management positions above classified salary ranges.

Other Compensation

In addition to salaries and bonuses, the Investment Board provides selected staff members with additional compensation, including lump-sum performance recognition payments that all state agencies may use to recognize meritorious performance, as well as three other compensation categories. Expenditures for this other compensation are shown in Table 19.

Table 19

Other Compensation Expenditures for Unclassified Staff
During Calendar Years 1999 through 2003

	1999	2000	2001	2002	2003	Total
Performance Recognition Payments	$42,200	$47,860	$ 26,825	$ 39,800	$ 25,750	$182,435
Signing Bonus	0	0	0	0	108,467	108,467
Guaranteed Bonus	0	0	0	150,000	0	150,000
Additional Retirement Contributions	0	0	32,674	49,040	40,082	121,796
Total	**$42,200**	**$47,860**	**$59,499**	**$238,840**	**$174,299**	**$562,698**

Performance Recognition Payments

Staff can receive both a bonus and a performance recognition payment during the same period.

Performance recognition payments are typically given to support staff and have ranged from $400 to $4,000, as shown in Table 20. However, the need for these payments outside of the Investment Board's bonus program may warrant review, especially when some staff are receiving lump-sum payments through both programs. For example, 14 of 21 individuals who received performance recognition payments during 2002 also received bonuses. We found one case in which the same activity was referenced as support for a performance recognition payment as well as a bonus.

Table 20

Performance Recognition Payments
1999 through 2003

Year	Low	High
1999	$ 400	$4,000
2000	1,000	3,000
2001	750	3,000
2002	1,000	4,000
2003	500	3,000

Investment Board staff have stated that performance payments provide more immediate recognition of specific meritorious actions or performance, while the bonus program recognizes overall performance during the year. However, unlike bonuses, which are approved by the trustees, performance recognition payments are awarded at the discretion of the Executive Director. In addition, the level of consideration given to performance payments while making bonus decisions is unclear.

☑ Recommendation

We recommend the State of Wisconsin Investment Board reconsider its use of performance recognition payments to provide financial awards to staff independent of its larger bonus program or, at a minimum, ensure that performance recognition payments are also considered when awarding bonuses.

Signing and Guaranteed Bonuses

As part of its new compensation plan, the Investment Board is also able to use signing and guaranteed bonuses as recruitment tools. The Investment Board believes that signing bonuses allow it to make up for the loss of an expected bonus from a previous employer or to compensate for new employees' costs for the first six months of health insurance. A guaranteed bonus can be used to compensate a new employee who may not be eligible to receive a performance bonus because of the timing of his or her hire, or to compensate for portfolio performance that is not under the control of the newly hired employee.

The Investment Board has provided four signing or guaranteed bonuses totaling $258,467.

Since 2000, the Investment Board has provided four signing or guaranteed bonuses:

- a guaranteed bonus of $150,000 was used to attract the chief investment officer for equities;
- a signing bonus of $54,000 was offered to attract a managing director for alternative investments;
- a guaranteed bonus of $50,000 was provided to an internal staff person to become the chief investment officer for alternative investments; and
- a signing bonus of $4,467 was used to cover six months of health insurance for a securities analyst position.

An individual who received a $54,000 signing bonus stayed with the State less than nine months.

Up-front bonus awards do not, however, guarantee that desired performance levels will follow. For example, the managing director of alternative assets who received the $54,000 signing bonus was hired in early 2003 but resigned less than nine months later and, as part of a termination agreement, was allowed to keep the signing bonus in return for not pursuing recourse action against the Investment Board.

In addition, trustees recently raised questions about the prior Executive Director's authority to award guaranteed or signing bonuses and other structures of compensation agreements without the Board of Trustees' knowledge. For example, during the recent reorganization of alternative investments, trustees were not aware that, in addition to a $50,000 guaranteed bonus, the investment staff person who became the chief investment officer for alternative investments had been granted a nine-month retroactive salary increase totaling $15,319. The Board of Trustees subsequently requested that the Compensation Committee obtain prior notification of all personnel actions, including signing or guaranteed bonuses and other contracted terms. At their June 2004 meeting, the trustees also voted to explicitly approve compensation levels for top investment staff, which previously had been left solely to the Executive Director's discretion.

Additional Retirement Contributions

Statutes define certain state employees as executive participating employees who are eligible for a higher formula factor in the calculation of Wisconsin Retirement System benefits. Employers are required to pay higher contributions for the higher retirement benefits these employees receive. The Investment Board staff eligible for executive classification are specified by ss. 40.02(30) and 19.42(10)(L), Wis. Stats., and include top management and investment directors. Section s. 25.16(2), Wis. Stats., limits the Investment Board to 11 investment director positions, which the Investment Board has designated as its chief investment officers, managing directors, and selected portfolio managers.

We found that the Investment Board's current compensation plan allows it to make additional retirement contributions, and thus provide higher retirement benefit amounts, for staff who are not designated as investment directors. The Investment Board cites as its authority for the additional contributions ss. 40.05(2)(g) and 40.05(2r), Wis. Stats., which allow participating employers to make additional contributions if approved as part of the employer's compensation plan. The Investment Board is the only state agency providing such contributions, although the Department of Employee Trust Funds indicates the provision is used by local employers on a limited basis. The Investment Board's rationale for the provision is to have the ability to equalize retirement benefits or to supplement the retirement benefit of senior-level employees who are subject to the federal limits on the amount of compensation that can be considered for pension plan purposes.

The Investment Board paid $121,796 in additional contributions to increase retirement benefits for selected staff.

The Investment Board has primarily used the additional contribution provision to provide comparable retirement benefits among its portfolio managers, because it has more portfolio managers than can be classified as investment directors. Beginning with 2001, the Investment Board has been making additional contributions for other senior portfolio managers, including six during 2001 and 2002 and four during 2003. In addition, it is making additional contributions for the Human Resource Director, whose position is not classified at the executive level. The Investment Board considers the Human Resource Director a senior manager and has been making the additional contributions to provide equity within its senior management team. In total, the Investment Board has paid $121,796 in additional retirement contributions through 2003. While the amount the Investment Board is paying for additional contributions is relatively small, by using the provision the Investment Board effectively circumvents the statutory limit on investment directors and management positions classified as executive positions.

☑ Recommendation

We recommend the State of Wisconsin Investment Board discontinue its practice of paying additional retirement contributions for staff not designated as executive participating employees, and pursue statutory changes if it believes additional executive positions are warranted.

Effect on Investment Staffing

Because the current compensation plan has been in place for only four years, it may be too early to fully assess its effect on retaining and recruiting investment staff, which can also be affected by market conditions. However, the current compensation plan appears, at least initially, to have had some dampening effect on investment staff turnover. During the five years before it was put in place, the Investment Board experienced turnover of between 8.0 and 16.0 percent of investment staff annually. As shown in Table 21, turnover percentages from 2000 through 2002 ranged from 5.8 to 9.6 percent.

Table 21

Investment Staff Turnover

Calendar Year	Investment Staff	Investment Staff Departures	Percentage Turnover
1995	44.0	4.0	9.1%
1996	44.0	4.0	9.1
1997	50.0	8.0	16.0
1998	50.0	4.0	8.0
1999	50.0	5.0	10.0
2000	51.9	3.0	5.8
2001	51.9	5.0	9.6
2002	51.9	3.0	5.8
2003	51.9	8.0	15.4

Further, three of the eight investment staff who left in 2001 and 2002 retired and were likely not affected by the compensation plan. Of the other five, four left for private-sector positions in 2001, and one left for personal reasons. Of the three analysts and one assistant portfolio manager who left for the private sector, two went to east coast investment management firms for compensation that doubled their ending Investment Board salaries. The other two took investment management positions in the Midwest and received somewhat more modest salary increases.

No investment staff moved to the private sector in 2002, and losses to higher paying private-sector positions remained low in 2003. Although 2003 turnover figures increased to 15.4 percent, five of the eight investment staff losses were the result of Investment Board's initiatives: three individuals left for other jobs after the Investment Board decided to discontinue the national private placements portfolio, and two alternative asset class managers resigned in September 2003. Among the three remaining investment staff losses, one individual retired, one returned to school, and one took a job in the private sector.

The Investment Board has been able to recruit more experienced investment staff.

The Investment Board also experienced improved success in its recruitment efforts. In January 2001, soon after implementation of the new compensation program, the Investment Board reported to the Joint Finance Committee that it had filled five vacant investment positions with individuals who had at least double the experience typical of applicants before the new compensation plan took effect. The increased experience level is further reflected in ten investment analysts hired during 2001 and 2002, who had an average of 7.6 years of experience. In addition, the Investment Board attributes its ability to attract a former employee to return as a chief investment officer to the new compensation plan and a guaranteed bonus.

However, the Investment Board's improved success in retaining and recruiting experienced staff may not be entirely attributable to the new compensation plan. Implementation of that plan coincided with an overall decline in the stock market and reduced opportunities for private-sector investment positions, especially at the more junior levels. The ability to remain competitive for experienced staff will be further challenged as markets improve and job opportunities increase in the private sector, and the expected retirement of several experienced investment staff in the next few years will continue to affect turnover and the Investment Board's need to recruit experienced staff.

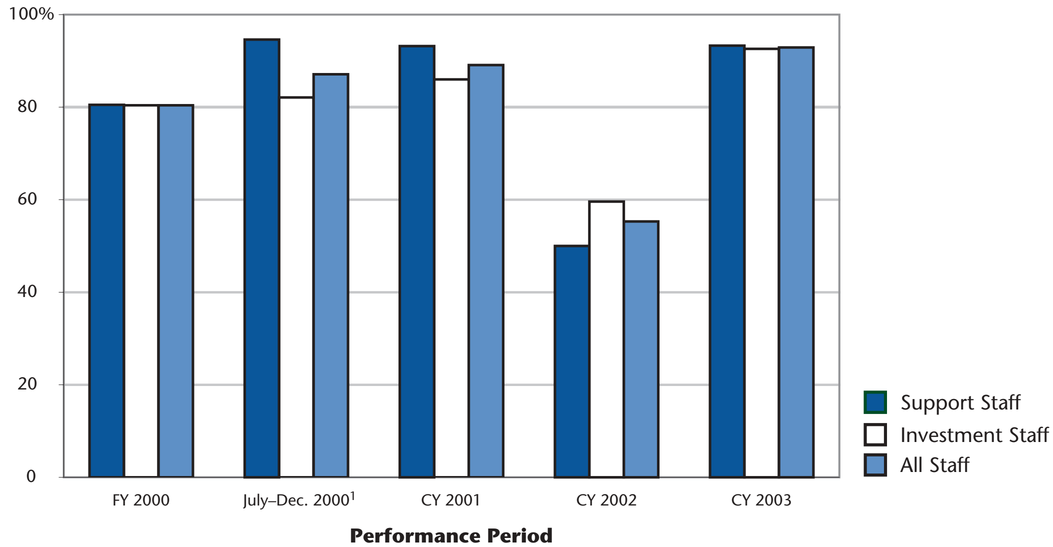
Rewarding Meritorious Performance

Bonuses were paid to at least 80 percent of staff for four of the five performance periods under the new bonus program.

As shown in Figure 6, the Investment Board paid bonuses to 80.0 percent or more of its staff for four of the five performance periods under the new bonus program. Recently distributed bonuses for calendar year 2003 performance were distributed to all but five of the staff eligible for bonuses. Only two investment staff, including the former Executive Director, and three support staff in management positions did not receive bonuses for 2003.

Figure 6

Percentage of Staff Receiving Bonuses



[1] The Investment Board amended the bonus program to change from a fiscal year performance basis to a calendar year basis, and a separate bonus was awarded for the interim 6-month period.

As noted, the Investment Board's complex process for identifying and rewarding meritorious performance depends on several quantitative performance measures and formulas, but it also involves qualitative judgment. In arriving at past bonus decisions under the current plan, Investment Board staff and trustees underwent a deliberate and documented process. As a result, the largest bonuses were awarded to investment staff whose performance added the most value to investments. In contrast, investment staff whose investment performance did not meet benchmarks received significantly lower or no bonuses.

Throughout its first years, the trustees have also given consideration to the role and operation of the bonus program in the new compensation plan, especially in light of the negative returns for the retirement funds from 2000 through 2002, and the State's ongoing financial difficulties. For example, board minutes suggest that extensive debate occurred among trustees regarding bonuses related to calendar year 2002 performance. Some trustees questioned whether any bonuses were warranted when the Fixed Retirement Trust Fund did not meet its one-year benchmark and produced an overall loss, so that beneficiaries faced the possibility of reduced annuities at the time. Other trustees acknowledged public and private-sector employee salary freezes and layoffs but believed that the Investment Board duties are specialized, and bonuses are expected in the investment industry when performance expectations are met or exceeded. The trustees ultimately decided that bonuses would be awarded for calendar year 2002 for portfolios that exceeded their benchmarks, but at a reduced level that reflected the public environment in which the Investment Board operates.

The trustees were especially sensitive to the status of other state employees when making bonus decisions for the Investment Board's support staff for calendar year 2002. While the typical bonus pool for these staff was established at 10.0 percent of support staff salaries, the pool was reduced to 2.0 percent of salaries for the 2002 bonuses. As a result, total bonuses paid to support staff decreased 75 percent, from $232,939 for calendar year 2001 to $59,000 for calendar year 2002. Average individual bonuses for support staff decreased 54.8 percent, from $5,681 for 2001 performance to $2,565 for 2002 performance.

As noted, the retirement funds subsequently experienced positive returns and exceeded benchmarks in 2003. In response, Investment Board staff were awarded $1.8 million in bonuses, the largest amount awarded since the inception of the new bonus program.

The new Executive Director and the trustees are currently considering changes to simplify the Investment Board's bonus structure. As part of this process, we believe it is important to ensure that the bonus structure continues to target the most meritorious performers and that bonuses are not used simply as supplements to salaries. Similarly, we encourage the Investment Board and the trustees to continue to factor in overall market trends and their effects on retirement system participants, and to consider equity issues in awarding compensation to support staff relative to staff in similar positions in other state agencies.

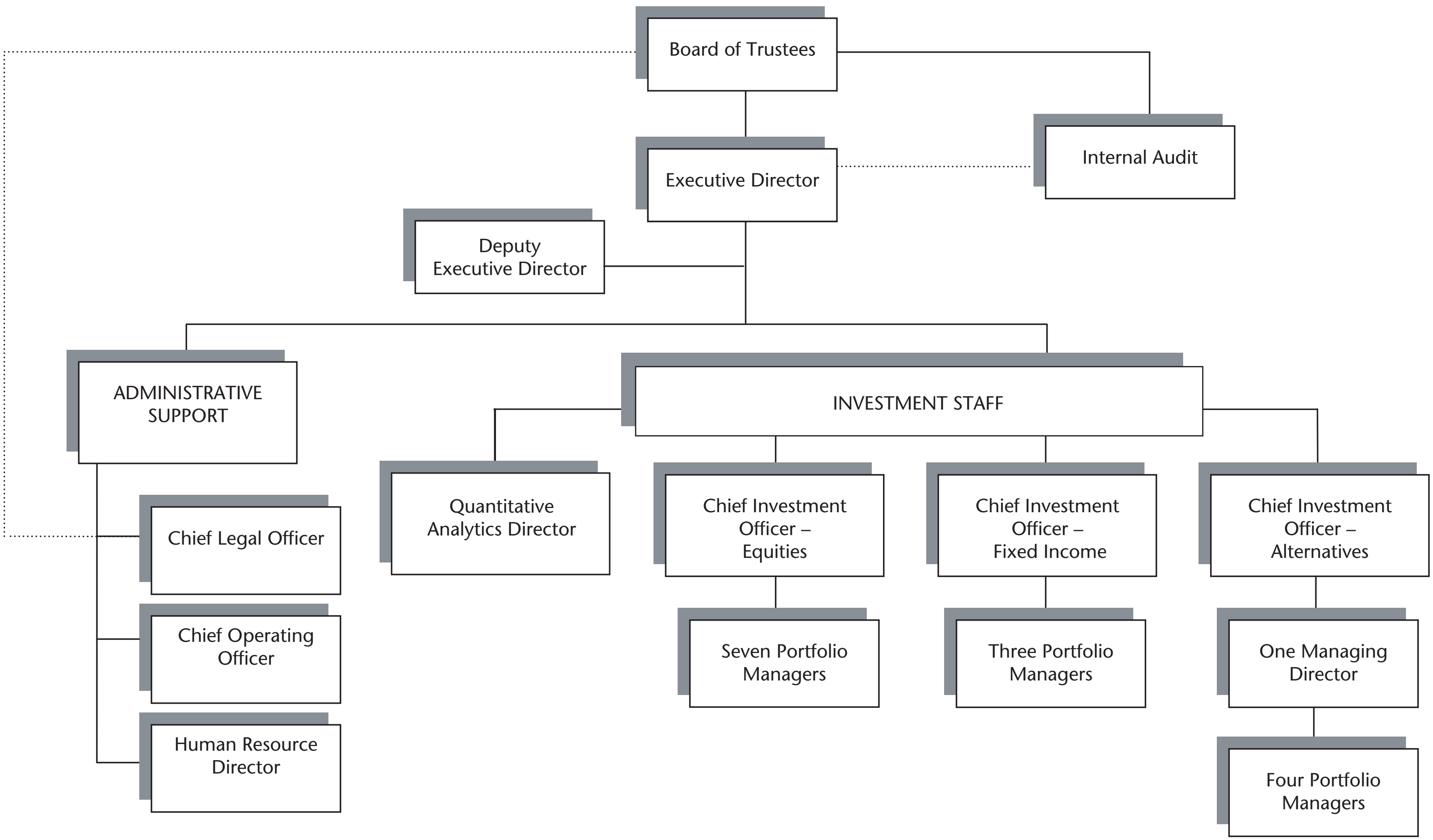
☑ Recommendation

We recommend the State of Wisconsin Investment Board remain diligent in using the bonus program to reward only meritorious performance and that it report to the Joint Legislative Audit Committee, upon completion, on changes it makes to its bonus program.

▪ ▪ ▪ ▪

Appendix 1

Investment Board Organization Chart



Appendix 2

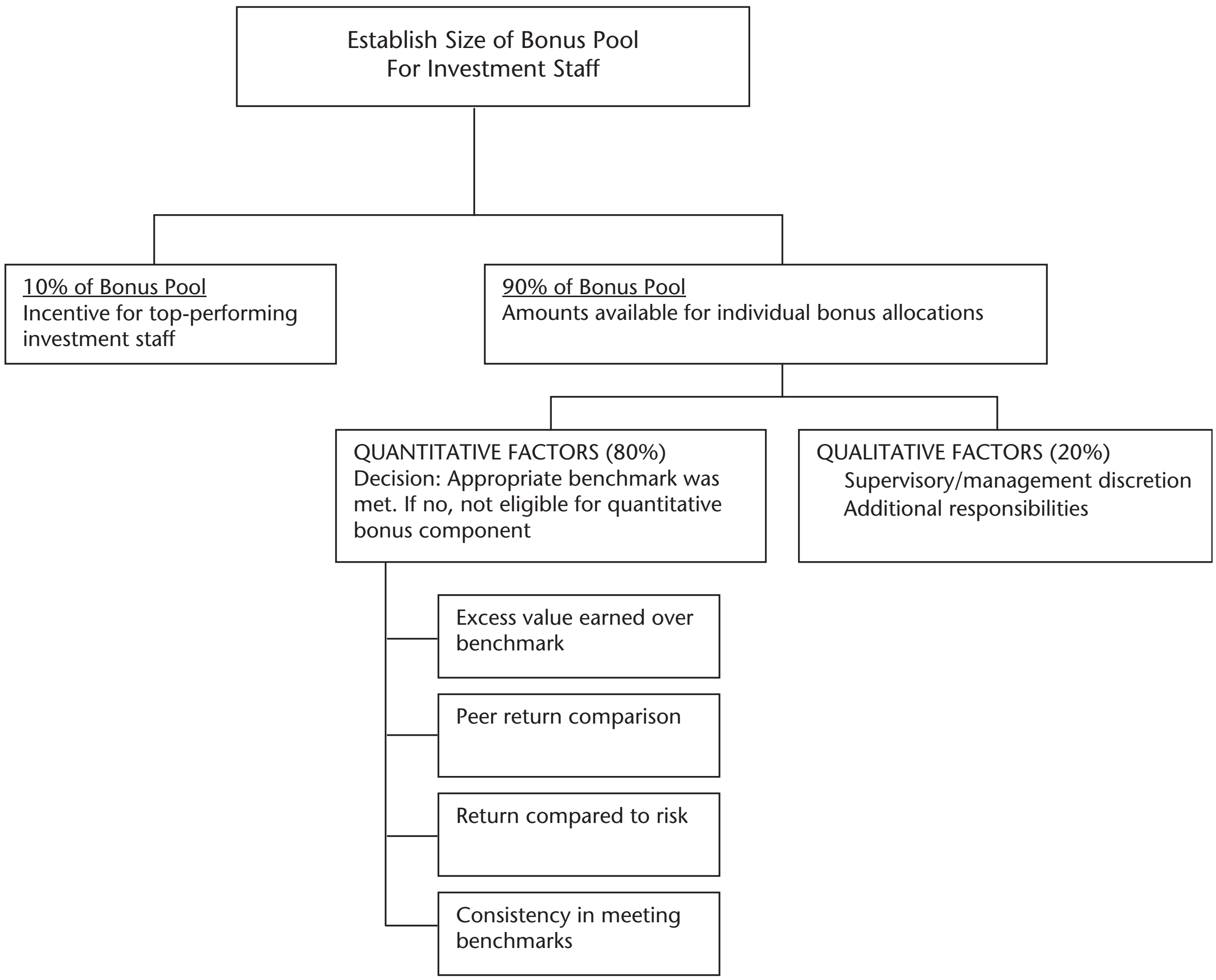
Performance of Fixed and Variable Retirement Trust Funds' Asset Classes[1]

Asset Class	Period Ending December 31, 2003	Actual Performance	Investment Benchmark	Excess/ (Deficiency)
Fixed Retirement Trust Fund				
Equities	1-year	34.3%	33.8%	0.5%
	5-year	2.8	0.6	2.2
	10-year	9.8	8.8	1.0
Fixed Income	1-year	9.7	8.2	1.5
	5-year	6.9	7.0	(0.1)
	10-year	7.5	7.5	0.0
Real Estate	1-year	10.2	7.8	2.4
	5-year	9.6	9.5	0.1
	10-year	10.0	9.2	0.8
Alternative	1-year	13.3	15.4	(2.1)
	5-year	4.4	10.2	(5.8)
	10-year	10.5	12.6	(2.1)
Variable Retirement Trust Fund				
Equities	1-year	33.5	32.1	1.4
	5-year	2.5	0.7	1.8
	10-year	9.7	8.8	0.9

[1] Excludes the effect of cash

Appendix 3

Bonus Award Process for Investment Staff



State of Wisconsin Investment Board

MAILING ADDRESS
PO BOX 7842
MADISON, WI 53707-7842

121 EAST WILSON ST
MADISON, WI 53702
(608) 266-2381
FAX: (608) 266-2436

November 15, 2004

Ms. Janice Mueller
State Auditor
Legislative Audit Bureau
22 East Mifflin Suite 500
Madison, WI 53703

Dear Ms. Mueller:

Thank you for the opportunity to review and respond to the management audit of the State of Wisconsin Investment Board (SWIB). We found your report to be balanced and constructive, and appreciate the time and effort that it reflects.

As the manager of one of the world's largest pension funds, SWIB strives to be a leader in applying best practices in all aspects of our business. Trustees and staff are committed to good governance and accountability to our members, the Legislature and Governor, and all our publics. We want to be as transparent as possible in conducting SWIB's business and ensure that those we serve have confidence that their funds are invested wisely and cost effectively. In that spirit, we have the following comments from staff regarding the three major topics covered in the audit: investment performance, compensation and cost of management. The full Board looks forward to your presentation and the opportunity to further discuss the audit at its Board meeting on December 8.

Our specific responses to the recommendations made in the audit are attached.

Investment Performance Surpassed Benchmarks and Peers

The audit confirms that SWIB's overall investment performance at December 31, 2003 is ahead of market performance benchmarks and compares favorably to our peers. For us, the Wisconsin Retirement System (WRS), and the other smaller trust funds that we invest, these are the most important findings:

- Investment returns for the WRS trust funds surpassed their performance benchmarks for the one-, five- and ten-year periods and are ahead of long-term actuarial assumptions. After three years of exceptionally poor markets, the 2003 returns for the Fixed Fund (24.2%) and Variable Fund (32.7%) were among the highest in the history of the WRS. This reflected a rebound in the stock market and the efforts of talented and dedicated SWIB staff. In 2003 alone, SWIB added over $560 million of additional return over the market benchmarks.

- The five-year return for the Fixed Retirement Fund ranked first in the LAB selected peer group of ten state pension funds and the one-year return ranked third. The Fixed Fund had the lowest level of volatility and the best return net of costs over the five-year period.

- Peer group rankings are affected by asset allocation decisions that result from liability projections, risk tolerance, statutory investment limitations and resource constraints, all of which vary from system to system. In today's highly competitive investment environment, managers rarely stay at the very top of their peer group year-in and year-out. However, the major conclusion that can be drawn from the audit is that SWIB's overall performance has exceeded major goals and moved into the upper tier of our peers over the last five years.

We have a disciplined approach to the allocation of assets to stocks, bonds, real estate and other markets. Our focus is long-term, and we aim to reduce risk and enhance returns through diversification. In the late 1990s, SWIB invested a smaller share of Fixed Fund assets in domestic stocks than did many of our peers. This decision raised questions at the time because it caused our overall return to lag many of our peers. However, SWIB believed that greater diversification was more prudent as a long-term strategy. As a result, the WRS suffered much smaller losses than many of our peers during 2000 through 2002 when an overvalued stock market experienced its worst downturn in 60 years.

Trustees and staff are taking steps to further strengthen our asset allocation process. Most market observers project that long-term returns from public markets will not match the exceptional levels of the late 1990s and 2003. SWIB continues to explore ways to add value in markets that remain challenging and volatile. We will be sure to provide more detailed information to you about our future plans in our annual goals and performance report to the Legislature in March.

Compensation Improvements Contribute to Favorable Investment Performance

The Legislature enacted compensation and budget improvements in 1999. We are very appreciative and believe that our favorable performance over the last five years would not have been possible without the increased flexibility provided in the legislation. Because of those improvements, we are losing fewer employees to the private sector and we are attracting and retaining employees with more experience:

- Nine of 11 analysts hired in the period prior to the new compensation plan had no investment experience. The 14 analysts hired since the enactment of the new compensation plan had, on average, over six years of experience.

- There has been nearly a 30% reduction in unplanned turnover among our investment staff since the new plan took effect.

- With many senior investment staff likely to retire over the next decade, it is critical that SWIB have capable, experienced staff ready to move into those positions. Had the new compensation plan not been in effect, we would be in a much worse position today.

When SWIB sought broader budget authority from the Legislature in 1999 it was understood that we would use it to raise investment staff compensation to the median of a peer group of banks, insurance companies, corporate trusts and foundations, all located primarily in the Midwest. This peer group excludes mutual funds, specialty investment firms and private investment organizations. Our peer group is a conservative measure of the marketplace and tends to understate the gap between SWIB and the businesses to which we have actually lost investment staff. SWIB has never had an investment professional leave to accept a position with another public pension organization and most public funds do not rely on their own staff to manage assets to the degree that SWIB does. For these reasons, we measure our compensation plan against the current peer group of private sector funds.

The goal of our plan is to reach 100% of the peer group median for overall compensation (salaries and bonuses) for investment staff. By 2003, we had progressed to 74% of the 2002 peer group median. SWIB has moved more slowly toward the median than our budget authority allowed. In its compensation decisions, the Board has taken into consideration investment performance, the impact of investment returns on WRS participants, the compensation environment for public employees, as well as competitive conditions in the investment marketplace.

We continue to work with the leading compensation consultant in the investment industry to ensure that our plan is thorough, rigorous and focused on rewarding performance. For investment staff, bonus factors include: achievement in relation to benchmarks, persistency of performance over time, performance compared to peers, the dollar amount of value added and risk adjusted return. The bonus pool for support staff is significantly smaller but recognizes the important contributions these staff make to the investment process in trade settlement, proxy voting, securities valuations, class action litigation, securities lending and other activities. Many of these duties are not commonly performed by other state employees and require special expertise.

Staff is currently reviewing the bonus program with the goal of making it more efficient and easier to understand, while ensuring that it continues to focus on merit and differentiates based on performance. Recommendations will be made to the Board in early 2005. We will be sure to update you on this work.

Cost of Management Affected by New Strategies and Resource Constraints

Our total costs of management (agency operations plus fees paid to outside vendors) are a function of three basic factors: (1) The asset mix that is chosen to meet the anticipated 7.8% long-term actuarial rate of return. Some assets are more costly to manage than others. (2) The level of active management that is used. In the public markets, choices range from passive management in low cost index funds to higher cost active buying and selling of individual securities. (3) The choice made between internal management by our professional investment staff or external management. Internal management is typically less expensive, but SWIB may not have the necessary expertise or resources to invest in a particular market.

SWIB's total cost to manage the Fixed Fund in 2003 was 28 cents per $100 managed (28 basis points). This compares to an average cost of 24 basis points for a peer group of 17 large public pension funds. Within the peer group, however, asset mixes and management styles vary. SWIB's cost matched the peer group median for the same asset mix and management styles as we use for the Fixed Fund. This was confirmed by an independent assessment by Cost Effectiveness Measurement, Inc., (CEM) which described SWIB as a "normal" cost fund. After costs, SWIB's performance exceeded the median return of other pension funds in the CEM peer group by $389 million in 2003.

Our costs of management have risen over the past five years for three major reasons:

1. *Aligning Internal Portfolios and Resources*. In 1999, SWIB actively managed 48% of its public market investments (stocks and bonds) internally. As a percent of assets, this was over two and half times the amount actively managed internally by our peers. Internal active management has been, and continues to be, a major ingredient in SWIB's success. However, several of our internal portfolios individually exceeded the aggregate assets of many public pension funds. Our small company stock portfolio and international stock portfolio were particularly large in relation to resources. These portfolios needed to be reduced to a more manageable size to decrease risk and provide greater diversification.

   At SWIB's request, the Legislature converted our internal budget from a fixed appropriation to 2.75 cents per $100 managed (2.75 basis points) beginning in 1999. We anticipated that with modest growth in assets we would have sufficient budget authority to more adequately support internal management. However, the stock market began a sharp three-year decline in 2000. The market value of assets under management fell, resulting in reduced budget authority that effectively precluded SWIB from adding staff. To address this resource problem and reduce portfolio size, SWIB began to reduce the assets actively managed internally. By 2003, internal active management had declined to 34% of public market assets. While we have reduced the size of some internal portfolios, several are still large by industry standards.

2. *Quantitative Strategies that Outperformed Market Indexes*. In 1998 SWIB began to transfer assets from an S&P 500 index fund to co-mingled portfolios which employ quantitative methods to outperform passive strategies. In retrospect, the timing was opportune in that the S&P 500 index peaked in 1999 and fell over the next three years. We expanded our use of quantitative strategies and converted them from a flat fee to a performance fee. Under this arrangement, SWIB pays a base amount that is lower than the previous flat fee. Additional compensation is paid if the manager exceeds certain performance thresholds. Because a number of our quantitative portfolios have had strong performance, fee expenses have risen. However, after fees are taken into account, the quantitative portfolios outperformed their passive index equivalents by a net $357 million since 1998. SWIB renegotiated fees in 2001, 2003 and 2004 which should result in significant future savings.

3. *Real Estate and Private Equity Shifted from Direct Deals to Fund Investments*. We invest in private markets primarily to achieve long-term returns that are greater than public markets, net of fees. In addition, these investments provide important diversification benefits because their returns are not closely correlated with public markets. SWIB's overall allocation to private markets is comparable to our peers. In addition to the benefit to the trust funds, private market investments, like private debt and venture capital, offer the best opportunities for contributing to the state's economic development.

   Private markets command higher fees than public markets. However, the fees we pay are typical for the industry. As SWIB has shifted from direct investments in these assets to investments in limited partnerships, management costs have risen. However, our real estate investments returned 9.6% over this five-year period, surpassing returns from the public markets. (The portfolio return figure reflects fee recovery when there is sufficient gain on the investment.)

   Recent strategy changes made in the private equity area should enhance the performance of these portfolios in the future. The selection process for the new consultant hired effective October 1, 2004 made sure that the firm chosen would add value and that its services will be fully utilized. Recent private equity returns are encouraging. Over the 12 months ending September 30, 2004, private equity returned 13.4% versus a benchmark of 2.6%.

Notwithstanding these comments, we agree that current budget and statutory controls at times can make it difficult for SWIB to manage assets in the most cost effective way. While we believe that SWIB is in compliance with the statutes with respect to assets that we manage externally, we agree that substantial changes have occurred in the financial markets since the time that the "15% limit" was first imposed. We welcome the opportunity to work with the Joint Legislative Audit Committee and Legislature to review and clarify current limits in light of today's investment marketplace, and also examine alternate ways of providing flexibility in managing SWIB's resources while maintaining accountability.

In summary, SWIB Trustees and staff are committed to achieving outstanding investment performance for the funds entrusted to our care. This audit contains many constructive recommendations that will assist us in meeting our investment objectives while ensuring accountability. Our more detailed response to the individual recommendations is attached to this letter. We look forward to working with your staff and the Joint Legislative Audit Committee as we move forward.

Sincerely,

David C. Mills
Executive Director

Attachment
SWIB Response to Audit Recommendations

1. **SWIB should evaluate and, in its annual report to the Legislature, report on the cost and added value provided through its quantitative funds compared to other options, such as index funds or fixed-fee arrangements**.

   Response: Our next annual goals and performance report to the Legislature in March 2005 will address the value added by quantitative funds in comparison to other investment options.

   The larger issue in the audit is that current statutory limitations can make it difficult for SWIB to make the most cost effective management choices. At the request of the Board, staff are conducting a comprehensive review to determine the optimal mix of internal and external management, active and passive management, and quantitative funds. This effort will consider the resources, fee arrangements and statutory authority needed to achieve the optimal mix. Staff will make recommendations to the Trustees in the spring of 2005, including legislation that may be required. We recognize that accountability will continue to be essential. We will comment further on this work in our March 2005 report.

2. **SWIB should continually reevaluate its contracting procedures to ensure that it is diligently analyzing and justifying the need for consulting services.**

   Response: SWIB is committed to ensuring that all consultant services are necessary and cost effective. We are now providing monthly reports to the Board which describe new consultant and service contracts, their purpose, the selection process and expected cost. Staff is conducting a review of consultant expenses for SWIB as a whole and within organizational units. The goal is to identify any steps that could improve oversight and ensure cost effectiveness. We will be making recommendations to the Board in the spring of 2005.

   The audit concluded that most investment consulting contracts appear reasonable but questioned whether SWIB obtained the expected value from a private equity consultant. This contract was not renewed and has been re-bid, effective October 1, 2004. The selection process was competitive and thorough, and was conducted with the active involvement of the Board. We believe the new firm will add significant value and expect that SWIB will make full use of the contracted services.

3. **SWIB should include in its quarterly reports to the Legislature all costs directly charged against investment income and provide more descriptive information regarding the nature of these costs.**

   Response: We agree that expanding the quarterly report to include all directly charged costs would be more informative. We will do that in future reports regardless of whether the statutory reporting requirement is changed to include all such expenses. We will also include more descriptive information about these costs.

4. **SWIB should reconsider its use of performance recognition payments to provide financial awards to staff independent of its larger bonus program or, at a minimum, ensure that performance recognition payments are also considered when awarding bonuses.**

   Response: We will take additional care to ensure that the same activity is not considered for both a bonus and performance recognition payment (PRP). We use PRPs for immediate recognition of accomplishments and use the bonus to reward performance over a longer period. Written justifications are required for PRPs and bonuses. We consider the amounts awarded under both programs when determining an individual's PRP or bonus. In 2004, no PRPs have been awarded to date because of this consideration. However, the continued ability to draw on both programs is important as circumstances change.

5. **SWIB should discontinue its practice of paying additional retirement contributions for staff not designated as executive participating employees, and pursue statutory changes if it believes additional executive positions are warranted.**

   Response: We plan to make this year's additional contributions for these non-designated employees at the normal time in December of 2004 because the affected staff have worked with the expectation that this benefit will be provided. We will propose a solution to the Legislature in 2005 to address the concern raised in the audit.

   SWIB has been making additional contributions for portfolio managers because they have responsibilities similar or, in some cases, identical to those of "investment directors" who are statutorily designated as executive participating employees. The Human Resources Director was also included in order to treat members of senior management equitably. These contributions were made under the authority of SWIB's compensation plan.

6. **SWIB should remain diligent in using the bonus program to reward only meritorious performance and report the Joint Legislative Audit Committee, upon completion, on changes it makes to its bonus program.**

   Response: We agree with the recommendation. We believe that the current bonus program carefully measures and rewards meritorious performance. However, staff is in the process of preparing recommendations to the Trustees to reduce the complexity of the program while ensuring that it rewards meritorious performance. This work will be completed in early 2005. We will report those changes to the Joint Legislative Audit Committee, as requested.